## **ACO Civil Construction Products**

Trafficable Cable Enclosures







Introduction and Overview Brochure

Cable pit and surface ducting systems for all applications



#### **The ACO Group**

Established in 1946, the ACO Group has manufactured products for over 60 years for the construction industry. The group operates on a global basis through its subsidiaries and manufacturing facilities in over 40 countries. ACO employs more than 3,500 people and has sales in excess of \$1 billion.

#### **ACO Cablemate®**

ACO Polycrete is one of Australia's foremost manufacturers of trafficable cable pits and continuous surface ducting systems for the electrical, communications and construction industries.



#### The Benefits

- Product solutions for all load classes
- The industry's largest range of lids and access covers including anti-slip varieties
- PowerLok® lid offering a choice of standard or high levels of security, without requiring a protruding locking bar encroaching into the pit space (patent pending)
- OH&S friendly galvanised steel lids not exceeding 25kg
- Purpose designed pit bodies manufactured from materials with excellent insulation (electrical resistivity)
- Full range of site accessories to ensure trouble free installation
- Product range supported by an established technical advisory service to ensure correct product selection and advice on installation





#### **Design & Innovation**

ACO believes in excellence of design and quality of product, giving users of ACO Cablemate® products confidence in a proven quality solution.

All products are designed and tested to meet the latest industry standards. ACO uses the latest design software, such as FEA (Finite Element Analysis) to ensure superior product performance.

#### **Polymer Concrete Cable Pits**

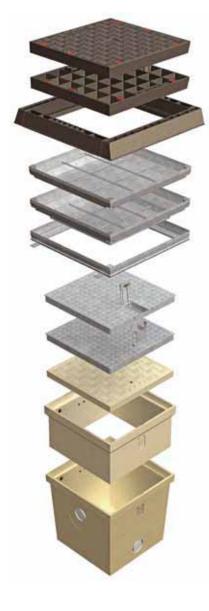
**Polycrete**®\* *Pits* have excellent insulation properties, high mechanical strengths, chemical resistance and zero water absorption, which makes them ideal as electrical and communications enclosures. Lighter and therefore less cumbersome than traditional concrete pits, only large **Polycrete**® *Pits* require special lifting equipment.

#### **Features**

- Manufactured from chemical and corrosion resistant lightweight polymer concrete
- Pit bodies 100% non metallic, insulated construction with an electrical resistivity rating of 1x108 \(\Omega\rho\)sq. (identical to concrete without steel reinforcing)
- Easy to fit and seal dividing walls
- Easy to handle & cut for cable entry penetration
- Range of anti-slip lids and access covers for all load classes to Class G (AS 3996)
- OH&S friendly steel lids not exceeding 25kg
- IP ratings up to IP4X (AS 60529) enclosure protection against ingress
- Aesthetic, recessed access covers for infill of pavement material to complement or match surrounding pavement
- Steel lids and access covers are hot dip galvanised to AS 4680
- · Access covers are weather resistant



Walls designed for easy cable entry penetration.



**Polycrete**® is ACO's trademark for products made from polymer concrete.

# Polyethylene Moulded Cable Pits

Polyethylene moulded pits are lightweight, easy to cut and feature a ribbed construction for strength and durability. Recommended for light duty applications, they are robust, cost-effective and versatile.

#### **Features**

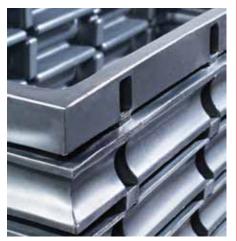
- Polyethylene recyclable plastic contains no toxic heavy metals – safe for the environment
- Ideal for use in light duty installations
- Lightweight, easy to handle & cut for cable entry penetration
- UV stable
- Range of anti-slip lids and access covers
- OH&S friendly steel lids not exceeding 25kg
- IP ratings up to IP4X (AS 60529) enclosure protection against ingress
- Aesthetic, recessed access covers allowing for the infill of pavement material to complement or match the surrounding pavement
- Steel lids and access covers are hot dip galvanised to AS 4680
- Access covers are weather resistant







## **Modular Surface Cable Ducting**



FEA designed continuous ribs for the efficient transfer of loads.



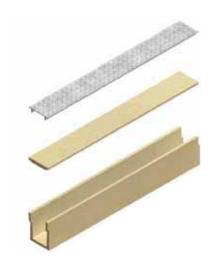
**Polycrete®** *Ducting*, light and heavy duty cable ducting systems are available in 100mm, 200mm and 300mm nominal widths. Ducts consist of one metre length modular channels that are assembled to produce continuous runs, and lids are available in polymer concrete, steel and ductile iron to suit every application up to Class G (AS 3996).

#### **Features**

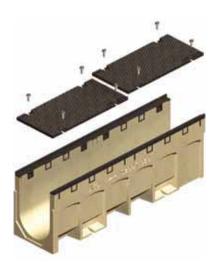
- Manufactured from lightweight, strong, durable polymer concrete
- Excellent insulation properties electrical resistivity rating of  $1x10^8\,\Omega/\text{sq}$ . (identical to concrete without steel reinforcing)
- Variety of lid options
- Modular interlocking male and female channel joints
- Continuous and unobstructed access when lids removed
- OH&S friendly lids not exceeding 25kg
- IP ratings up to IP4X (AS 60529) enclosure protection against ingress
- Steel lids are hot dip galvanised to AS 4680
- Cost effective and easy installation



**Polycrete** *bids* ensure a complete system comprising non metallic components.









Cable runs often traverse through different urban environments. Specific consideration needs to be given to each individual enclosure. Issues to address include:

- **1. Size** The correct pit/surface ducting channel size must be selected
- **2. Location** The anticipated traffic to traverse over the enclosure and the nature of the adjacent terrain must be assessed.
- **3. Safety & Security** The enclosure must protect humans and livestock against physical contact with its contents; and also protect its contents from unauthorised access.

#### 4. Site & User Requirements -

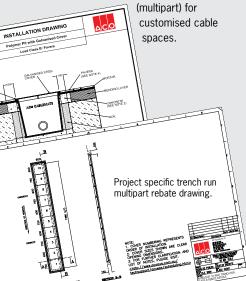
The correct method of installation and maintenance is critical. In addition, consideration must be given to an enclosure's aesthetics and identification.

### **Technical Support**

ACO has an established technical department with many years experience advising on the use of cable enclosures generally and for individual projects.

Services are offered with no obligation and are supported with high quality information and technical documentation.

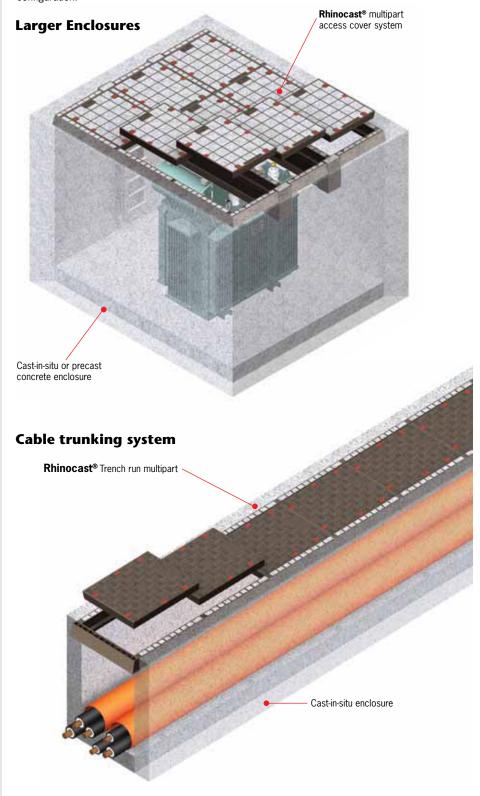
- **1. Enclosure Selection** ACO will perform a spacial analysis to determine the optimum size as well as assist with the selection of the most appropriate lid/cover type.
- **2. Installation Advice** ACO will provide a CAD/PDF installation illustration and guidelines.
- **3. Custom Enclosure** ACO will configure a bespoke access cover arrangement





#### **Other Products**

Maintenance (or access holes) and cable trunking runs are enclosed with access covers arranged in a multipart or trench run configuration.





#### **Other ACO product lines**

#### ACO DRAIN

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

#### ACO ACCESS

A range of ductile iron, galvanised steel and composite access covers in a wide range of sizes and configurations from single to large multipart units.

#### **ACO STAINLESS**

A range of high performance stainless steel drainage channels, grates, floor drains and pipes for hygiene and aesthetic applications.

#### ACO SPORT

A range of surface drainage systems and ancillary products for sport fields, running tracks and stadiums.

#### ACO HOME

A range of economical domestic drainage products, ideal for homes, gardens and landscaped areas.

#### **ACO CABLEMATE®**

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

#### ACO Polycrete Pty Ltd ABN 65 050 102 942

www.acoaus.com.au

Sales Hotlines Australia 1300 765 226 New Zealand 0800 448 080 Export +61 2 4747 4000 Email sales@acoaus.com.au

Technical Services Email technical@acoaus.com.au

## New South Wales and Head Office

134-140 Old Bathurst Road Emu Plains NSW 2750 Australia Telephone +61 2 4747 4000 Facsimile +61 2 4747 4060 aconsw@acoaus.com.au

#### Western Australia

33-35 Sorbonne Crescent Canning Vale WA 6155 Telephone 08 6250 3700 Facsimile 08 6250 3799 acowa@acoaus.com.au

#### Queensland

467 Tufnell Road Banyo QLD 4014 Telephone (07) 3267 8700 Facsimile (07) 3267 8711 acoqld@acoaus.com.au

#### Victoria & Tasmania

9 Overseas Drive Noble Park VIC 3174 Telephone (03) 9795 3666 Facsimile (03) 9795 6444 acovic@acoaus.com.au

#### South Australia & Northern Territory

Unit 14, 17-19 Churchill Road North, Dry Creek, SA 5094 Telephone (08) 8162 7800 Facsimile (08) 8162 7899 acosa@acoaus.com.au



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