



# economy

ENCLOSURES

## Did you know that A&B Industries is the manufacturer?

We manufacture and distribute the products directly to you. There is no “middle man” this guarantees that you receive the best possible product at the best possible price.

## Great Product Design and Functionality

A&B Industries Product Manager and founder is a mechanical tradesman who has been in the trade for over 25 years. His experience means that the product is designed to ensure that it functions the way it's supposed to, that's why we say A&B Industries is “Designed by tradesmen for tradesmen”. Our products are tested for reliability and safety. We have all the relevant approvals needed for our products such as the Australian Standards.

## Complies to the Australian & New Zealand Standards

Product safety is a priority for us at A&B Industries. That is why we ensure that products comply with the Australian & New Zealand Standards.

### *What are Australian & New Zealand Standards (AUS/NZ)?*

These Standards have been developed with a set of criteria's which the product must meet. To achieve this status, the product must pass a series of tests in which it is put under difficult conditions that are designed to be similar to those that the item will endure in its day to day function. If the product has passed these tests then it gains certification under the Australian and New Zealand Standard.

It is a requirement by legislation that if a product needs approval, then we must ensure that it is certified before it's sold to the customer. All Electrical manufacturers regardless of whether they are a sole trader or large multinational company must meet the same standard.

Our Gas Heating products are all audited yearly and Certified by the Australian Gas Association to comply with strict Gas Legislation.

## Quality Assurance

Our aim has always been to offer our customers Quality. We use ISO 9001 Quality Management Systems.

## 100% Australian Owned

When you buy from A&B Industries you are supporting an Australian family owned and managed company. We employ around 20-30 full time and casual employees.

## Certification & Accreditations

A&B is certified and accredited to the following standards: –

- ISO 9001:2008. Quality system helps ensure consistent product and traceability.
- AS/NZS 4801:2001. OH&S system protects our work force from dangers of working with sheet metal.
- NATA tested products – independently tested IP ratings
- AGA approved and tested

## History

Key dates in the history of A&B are as follows:

- 1987 – A&B founded manufacturing Gas Heating and some Electrical Products.
- 1998 – Formation of Domestic Enclosures Division
- 1998 – Move to new premises in Salisbury South SA to increase capacity
- 2000 – Extension of Salisbury South premises completed
- 2007 – Celebrates 20 years of business.
- 2011 – Release of NBN enclosure system solution
- 2015 – Upgrade of existing plant to include new conveyor line and CNC Turret press.
- 2015 – Re-branding of A&B, consolidating all divisions to offer a unified vision for the future.
- 2016 - Installation of Powder Coating Oven and line.

## Manufacturing Facilities

### Adelaide – 2,000m<sup>2</sup>

Residential Commercial Electrical, Meter Enclosure, Gas Heating, Wood Fire and Fencing products are primarily manufactured from our facility in South Australia. Facilities include the following equipment.

- 8 various style “G” Presses
- 2 Guillotines with a capacity to cut 3.0 MS up to 2400 long.
- 30 Ton 2500 x 1200 Nishimbo CNC Turret Press
- CNC Plasma Cutting
- Tig welding of Stainless Steel and Aluminium
- Mig welding facilities.
- 4 Mechanical Brake Presses for folding material 3.0 x 3m long.
- Spot Welders.
- Flue Pipe forming and rolling machinery.
- Spray painting booth and conveyor line.
- Tool room facility to maintain and manufacture tooling and jigs.
- Transport capability to give on time delivery.

“

*A&B Industries have been supplying our Wholesale Branches with various Electrical Components using high quality and precision work of complex fabrication tasks, managing production requirements against workshop commitments.*

”



## About A&B Industries

**Welcome to our brand new brochure, we trust that this will be of assistance to you.**

A&B Industries is proud to be an Australian sheet metal manufacturer with our factory located in the northern suburbs of Adelaide in South Australia.

We specialize in the manufacture of high quality products and components from Galvanised, Aluminium and Stainless steel sheets. We have also great expertise in the manufacture of steel brackets, usually in hot dipped Galvanised finish.

Over the past two decades A&B Industries have developed a large range of standard products, enclosures and hot dipped Galvanised brackets for the Electrical, and Gas/ventilation, Wood Fire and Fencing Industries.

A&B Industries are also able to offer custom-built sheet metal enclosures for the electrical/electronic industry, from single units to small/medium production runs with obligation free assistance in design and quotations.

A&B Industries also like to highlight their ability to manufacture non-standard equipment in: Galvanised steel, Stainless steel, Aluminium, mild steel tubing etc.

- Switchboards and general purpose enclosures complete with cut-outs, equipment mounting plates, rain hoods.
- Powder coating of our products in any colour
- Ducting and flashings.
- Galvanised protection cages in any size
- Customer's Support Poles as specified by SAPN Guide for Customer's support poles
- Guillotining, bending, punching, welding, CNC Turret Punching and CNC Plasma Cutting

**Feel free to call us anytime during working hours for an obligation free quotation and assistance in design.**



## Selecting The Right Enclosure

### Size

Where are you installing? What is the available space? What compliances? What features do you require? Yes, we can do custom configurations and accessories.

### Supply Authority Requirements

Each state in Australia has regulation requirements when selecting an enclosure.

### IP Protection Rating

This is the degree of protection of an electrical enclosure against dust, dirt and water. Called an IP rating. The higher the number the better the degree of protection.

### Materials

Material is typically selected based on the application, environment and location. A&B Industries Enclosures provide powder coated, Galvanised steel for general applications and grade 304 and 316 Stainless steel for high corrosion resistance.

### Where to buy

Purchase directly from us via our online shop at [abindustries.com.au/online-shop](http://abindustries.com.au/online-shop). Alternatively our products are available through our distribution network of Electrical Wholesalers.

### Delivery

See our supply strategies opposite. All our Enclosures are shipped from Adelaide South Australia. Our customer service team will advise you of a delivery time to help your needs.

## Customisation and Accessories

What accessories are you needing? We offer the following accessories:

- Rain Hood Canopies,
- Sun Shields,
- Extra Gland Plate for top cable entry,
- Keyed Locks,
- T Handle,
- L Handle and Knob Locks,
- Keyed flush locks,
- Padlock kits,
- Door Stays,
- External Vent Plates,
- Pole Mounting Kits,
- Plan Holders,
- Wall Mounting Brackets,
- Internal Slotted Din Rail,
- Inner Door and Escutcheon Kits,
- Galvanized Channel Iron Plinths,
- Plinths,
- Latch Keys,
- Lifting Lugs and Poly Carbonate Door Windows.

We can price these over the phone or in a Sales Quote.

## A&B Supply Strategies

### Stocked Product

These products are available ex stock from our warehouse. Contact our sales representative for further requirements.

### Assembled to order

These are assembled to your requirements upon receipt of your Purchase Order. These standard enclosures have a varied lead time so contact A&B to confirm your lead time or requirements.

### Engineered custom to order

These enclosures are custom designed to fit your purpose and site requirements. Contact us for more information. Lead time is a minimum of 2-3 weeks.

## Icon Descriptions



Stocked Item.



Assembled to order.



Custom to Order



Made in Australia



Manufactured using Australian Grade Z275 Galvanized Steel.



IP Rating of 23 (Refer IP Rating chart)



IP Rating of 42 (Refer IP Rating Chart)



IP Rating of 55 (Refer IP Rating Chart)



IP Rating of 66 (Refer IP Rating Chart)



Powder Coated finish (Refer Powder Coating information)



Manufactured using Australian Grade 304 2b Stainless Steel.



Manufactured using Australian Grade 316 2b Stainless Steel.



Manufactured using Australian Grade ZF100 Galvanized Steel.



## Degrees of protection provided by enclosures (IP Code) AS 60529—2004.

The IP Code, International Protection Marking, IEC standard 60529, sometimes interpreted as Ingress Protection Marking, classifies and rates the degree of protection provided against intrusion (body parts such as hands and fingers), dust, accidental contact, and water by mechanical casings and electrical enclosures. It is published by the International Electro Technical Commission (IEC). The equivalent Australian standard is AS 60529-2004..

### 1ST NUMERAL - Protection against Solids

|          |   |
|----------|---|
| <b>1</b> | <i>Protected against solid bodies greater than 50mm.</i>              |
| <b>2</b> | <i>Protected against solid bodies greater than 12mm.</i>              |
| <b>3</b> | <i>Protected against solid bodies greater than 2.5mm.</i>             |
| <b>4</b> | <i>Protected against solid bodies greater than 1mm (small tools).</i> |
| <b>5</b> | <i>Protected against dust (no harmful deposits).</i>                  |
| <b>6</b> | <i>Fully protected against dust.</i>                                  |

### 2ND NUMERAL - Protection against Liquids

|          |  |
|----------|--|
| <b>1</b> | <i>Protected against dripping water (condensation).</i>                  |
| <b>2</b> | <i>Protected against falling water up to 15° from the vertical.</i>      |
| <b>3</b> | <i>Protected against rain water splashing in all directions.</i>         |
| <b>4</b> | <i>Protected against water splashing in all directions.</i>              |
| <b>5</b> | <i>Protected against water jets from all directions.</i>                 |
| <b>6</b> | <i>Protected against wave like water jets from all directions.</i>       |
| <b>7</b> | <i>Protected against immersion.</i>                                      |
| <b>8</b> | <i>Protected against the effects of prolonged immersion under water.</i> |

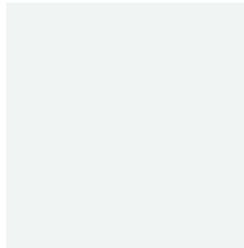
## Powder Coating Specifications



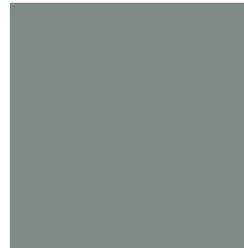
**Orange x15**  
(51439)



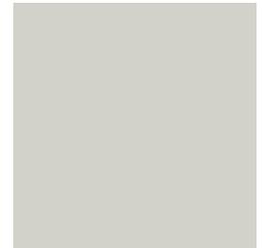
**Light Grey Scylla**  
(50766)



**Pearl White**  
(1114G)



**Transformer Grey**  
(32186)



**Surf Mist**  
(1137S)

A&B Industries uses the electrical industry colours of Surf Mist (1137S) Domestic Enclosures, Light Grey Scylla (50766) Multi Meter Enclosures, Orange X15 (51439) Caravan Park Enclosures and Temporary Enclosures, Transformer Grey (32186) SAPN Enclosures and Pearl White (1114G) Internal Components.

All powder coated enclosures manufactured at A&B Industries are powder coated using Dulux Powder and Industrial Coatings® and conform to the following testing. All test results are recorded and audited in accordance with ISO 9001: 2008 Quality System.

### The Pre-Treatment Process

The majority of A&B's powder coated products are manufactured from zinc coated steel. This has a continuous hot dipped zinc coating (20 microns) added to the raw material, giving added corrosion resistance. The pre-treatment process itself consists of cleaning which removes all unwanted oils and grease.

### Powder Coating Thickness Test

The powder coat paint is applied to the steel at an average coating of 100 microns for ripple finish and 70 microns for gloss finish. The minimum coating thickness is 60 microns on the exterior, and 25 microns on the interior of the enclosure, which conforms to AS/NZS4506: 1998.

The paint thickness tests are conducted regularly, to a specified frequency, using a calibrated paint inspection gauge. The method of testing complies with the requirements of AS1580.108.1 – 1994.

### Cure Test (Solvent Resistance Method)

Using a cure test solvent, the powder coat paint is tested to differentiate between cured and under-cured powder coatings. The test has been developed in consultation with our powder coating suppliers, and incorporates the comparison of the test results with known cured panels. The method of testing complies with the requirements of AS/NZS4506:2005.

### Adhesion (Cross Cut Test)

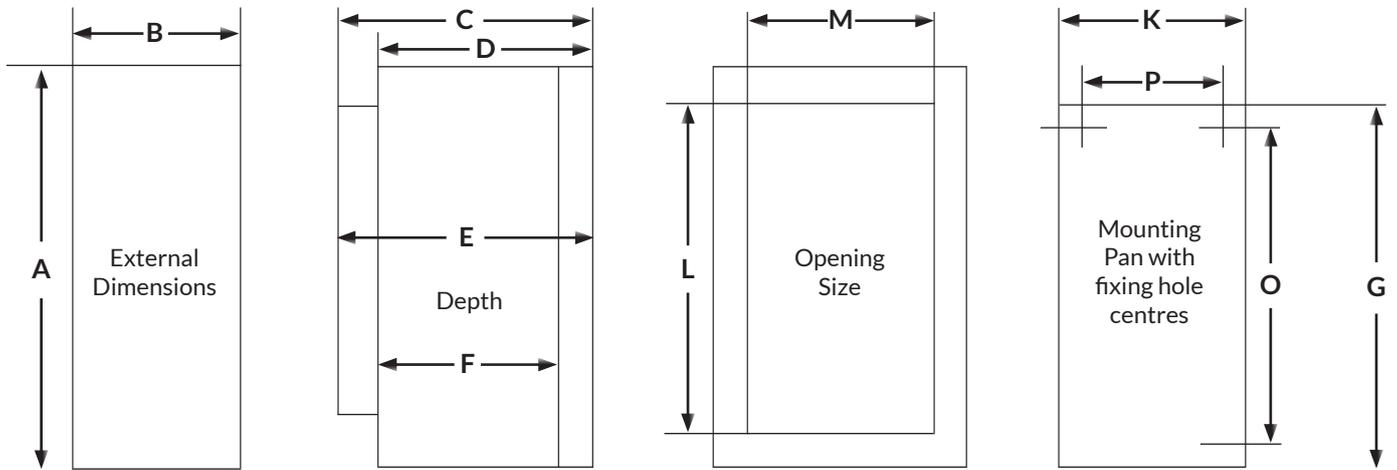
This test is conducted to confirm that the adhesion properties satisfy the requirements of AS/NZS1580.408.4 – 1993.

### Paint Color Comparison Test

All powder coated colors used by A&B Industries are inspected every time they are used to approve samples. The samples themselves are calibrated, to ensure that they match the colour standards specified in AS2700 – 1996, or an approved customer supplied sample.



## PREMIUM economy enclosures



**A&B Economy Enclosures are a premium brand of high quality, functional wall mounted electrical enclosures.**

A&B Industries Economy Enclosures are a premium quality wall mounted general purpose electrical enclosures. An Economy Enclosure is an enclosure readily used in the mining, oil & gas, infrastructure, industrial, commercial, communications, defence and food and beverage industries. The Economy Enclosure range of electrical enclosures are rated IP55, IP65 and IP66. Manufactured from powder coated galvanized mild steel and 304 and 316 #4 grade stainless steel, sizes range from 300H x 200W x 150D to 1200H x 1200W x 400D. Available to be shipped nationally, on-line at [www.abindustries.com.au](http://www.abindustries.com.au) and via [enquiries@abindustries.com.au](mailto:enquiries@abindustries.com.au). Call for sales and technical support. All A&B Enclosures incorporate advanced design features and each enclosure is manufactured to the highest of Australian standards.



| Catalogue No.   | External Dimensions    | Internal Depth | Mounting Pan | Opening Size | Fixing Centres |
|-----------------|------------------------|----------------|--------------|--------------|----------------|
|                 | A x B x C x D          | E x F          | G x K        | L x M        | O x P          |
| EP321-ES321     | 300 x 200 x 150 x 127  | 148 x 115      | 245 x 145    | 250 x 150    | 225 x 125      |
| EP322-ES322     | 300 x 200 x 200 x 177  | 198 x 165      | 245 x 145    | 250 x 150    | 225 x 125      |
| EP331-ES331     | 300 x 300 x 150 x 127  | 148 x 115      | 245 x 245    | 250 x 250    | 225 x 225      |
| EP431-ES431     | 400 x 300 x 150 x 127  | 148 x 115      | 345 x 245    | 350 x 250    | 325 x 225      |
| EP432-ES432     | 400 x 300 x 200 x 177  | 198 x 165      | 345 x 245    | 350 x 250    | 325 x 225      |
| EP541-ES541     | 500 x 400 x 150 x 127  | 148 x 115      | 445 x 345    | 450 x 350    | 425 x 325      |
| EP542-ES542     | 500 x 400 x 200 x 177  | 198 x 165      | 445 x 345    | 450 x 350    | 425 x 325      |
| EP5425-SE5425   | 500 x 400 x 250 x 227  | 248 x 215      | 445 x 345    | 450 x 350    | 425 x 325      |
| EP641-ES641     | 600 x 400 x 150 x 127  | 148 x 115      | 545 x 345    | 550 x 350    | 525 x 325      |
| EP642-ES642     | 600 x 400 x 200 x 177  | 198 x 165      | 545 x 345    | 550 x 350    | 525 x 325      |
| EP651-ES651     | 600 x 500 x 150 x 127  | 148 x 115      | 545 x 445    | 550 x 450    | 525 x 425      |
| EP652-ES652     | 600 x 500 x 200 x 177  | 198 x 165      | 545 x 445    | 550 x 450    | 525 x 425      |
| EP6525-ES6525   | 600 x 500 x 250 x 227  | 248 x 215      | 545 x 445    | 550 x 450    | 525 x 425      |
| EP752-ES752     | 700 x 500 x 200 x 177  | 198 x 165      | 645 x 445    | 650 x 450    | 625 x 425      |
| EP7525-ES7525   | 700 x 500 x 250 x 227  | 248 x 215      | 645 x 445    | 650 x 450    | 625 x 425      |
| EP862-ES862     | 800 x 600 x 200 x 177  | 198 x 165      | 745 x 545    | 750 x 550    | 725 x 525      |
| EP8625-ES8625   | 800 x 600 x 250 x 227  | 248 x 215      | 745 x 545    | 750 x 550    | 725 x 525      |
| EP863-ES863     | 800 x 600 x 300 x 277  | 298 x 265      | 745 x 545    | 750 x 550    | 725 x 525      |
| EP10625         | 1000 x 600 x 250 x 227 | 248 x 215      | 945 x 545    | 950 x 550    | 925 x 525      |
| EP1063-ES1063   | 1000 x 600 x 300 x 277 | 298 x 265      | 945 x 545    | 950 x 550    | 925 x 525      |
| EP1083-ES1083   | 1000 x 800 x 300 x 277 | 298 x 265      | 945 x 945    | 950 x 750    | 925 x 725      |
| EP12625-ES12625 | 1200 x 600 x 250 x 227 | 248 x 215      | 1145 x 545   | 1150 x 550   | 1125 x 525     |
| EP1263-ES1263   | 1200 x 600 x 300 x 277 | 298 x 265      | 1145 x 545   | 1150 x 550   | 1125 x 525     |
| EP1283-ES1283   | 1200 x 800 x 300 x 377 | 298 x 265      | 1145 x 745   | 1150 x 750   | 1125 x 725     |



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## Economy Enclosures Stainless Steel Single Door



A general-purpose enclosure available in Stainless Steel.

Economy Enclosure 304 and 316 #4 Brushed Stainless Steel Single Door IP 65.

- Galvanized Z275 3.0mm Heavy Duty Mounting Pan supplied and fitted as standard.
- Made to be compliant with, AS/NZS3000, AS/NZS6002, AS/NZS3439 and AS/NZS3012.
- Standard finish is #4 brushed finish.
- Manufactured using Australian 1.0-1.5mm 304 or 316 Stainless Steel.
- Cable entry Gland Plate, Polyurethane seal and fixings supplied in the base.
- Rated IP 65 protection rating.
- Stainless Steel ¼ turn, Square Drive, Door Lock.
- Flush.
- Earth Strap and M6 Earth Studs supplied.
- Concealed removable Door hinges with removable pins.
- Reversible LH or RH Door with 130 degree opening.
- 3-point locking available for enclosures larger than 800 wide.



### Customisation and Accessories:

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>• Rain Hoods</li> <li>• Sun Shields</li> <li>• Pindle Hinges</li> <li>• Lift Off Hinges</li> <li>• T Handle Door Locks</li> <li>• L Handle Door Locks</li> <li>• Keyed Knob Locks</li> <li>• Keyed Flush Locks</li> <li>• Swing Handle Padlock Kits</li> </ul> | <ul style="list-style-type: none"> <li>• D Handles</li> <li>• Door Stays</li> <li>• Plan Holders</li> <li>• Internal Slotted Din Rail</li> <li>• External Ventilation Plates</li> <li>• Pole Mounting Kits</li> <li>• Galvanized Channel Iron Plinths</li> <li>• Plinths</li> <li>• Inner Door Kits</li> </ul> | <ul style="list-style-type: none"> <li>• Escutcheon Covers</li> <li>• Rack Brackets</li> <li>• Polycarbonate Door Windows</li> <li>• Extra Gland Plate for top cable entry</li> <li>• External Mounting Brackets</li> <li>• Latch Lugs</li> <li>• Lifting Lugs</li> <li>• <i>Special Sizes made to order</i></li> </ul> |
|---|--|---|



## Economy Enclosures Stainless Steel Single Door

| # Code  | Product Details                         | Qty |
|---------|---|-----|
| ES221   | 200X200X150 Stainless 304 #4 1.0mm IP65 | 1   |
| ES221P  | 200X200X150 Stainless 316 #4 1.0mm IP65 | 1   |
| ES321   | 300X200X150 Stainless 304 #4 1.0mm IP65 | 1   |
| ES321P  | 300X200X150 Stainless 316 #4 1.0mm IP65 | 1   |
| ES322   | 300X200X200 Stainless 304 #4 1.0mm IP65 | 1   |
| ES322P  | 300X200X200 Stainless 316 #4 1.0mm IP65 | 1   |
| ES331   | 300X300X150 Stainless 304 #4 1.0mm IP65 | 1   |
| ES331P  | 300X300X150 Stainless 316 #4 1.0mm IP65 | 1   |
| ES331P  | 300X300X150 Stainless 316 #4 1.0mm IP65 | 1   |
| ES332   | 300X300X200 Stainless 304 #4 1.0mm IP65 | 1   |
| ES332P  | 300X300X200 Stainless 316 #4 1.0mm IP65 | 1   |
| ES3325  | 300X300X250 Stainless 304 #4 1.0mm IP65 | 1   |
| ES3325P | 300X300X250 Stainless 316 #4 1.0mm IP65 | 1   |
| ES431   | 400X300X150 Stainless 304 #4 1.0mm IP65 | 1   |
| ES431P  | 400X300X150 Stainless 316 #4 1.0mm IP65 | 1   |
| ES432   | 400X300X200 Stainless 304 #4 1.0mm IP65 | 1   |
| ES432P  | 400X300X200 Stainless 316 #4 1.0mm IP65 | 1   |
| ES442   | 400X400X200 Stainless 304 #4 1.0mm IP65 | 1   |
| ES442P  | 400X400X200 Stainless 316 #4 1.0mm IP65 | 1   |
| ES541   | 500X400X150 Stainless 304 #4 1.0mm IP65 | 1   |
| ES541P  | 500X400X150 Stainless 316 #4 1.0mm IP65 | 1   |
| ES542   | 500X400X200 Stainless 304 #4 1.0mm IP65 | 1   |
| ES542P  | 500X400X200 Stainless 316 #4 1.0mm IP65 | 1   |
| ES5425  | 500X400X250 Stainless 304 #4 1.0mm IP65 | 1   |
| ES5425P | 500X400X250 Stainless 316 #4 1.0mm IP65 | 1   |

| # Code  | Product Details                         | Qty |
|---------|---|-----|
| ES641   | 600X400X150 Stainless 304 #4 1.2mm IP65 | 1   |
| ES641P  | 600X400X150 Stainless 316 #4 1.2mm IP65 | 1   |
| ES642   | 600X400X200 Stainless 304 #4 1.2mm IP65 | 1   |
| ES642P  | 600X400X200 Stainless 316 #4 1.2mm IP65 | 1   |
| ES6425  | 600X400X250 Stainless 304 #4 1.2mm IP65 | 1   |
| ES6425P | 600X400X250 Stainless 316 #4 1.2mm IP65 | 1   |
| ES651   | 600X500X150 Stainless 304 #4 1.2mm IP65 | 1   |
| ES651P  | 600X500X150 Stainless 316 #4 1.2mm IP65 | 1   |
| ES652   | 600X500X200 Stainless 304 #4 1.2mm IP65 | 1   |
| ES652P  | 600X500X200 Stainless 316 #4 1.2mm IP65 | 1   |
| ES6525  | 600X500X250 Stainless 304 #4 1.2mm IP65 | 1   |
| ES6525P | 600X500X250 Stainless 316 #4 1.2mm IP65 | 1   |
| ES6625  | 600X600X250 Stainless 304 #4 1.2mm IP65 | 1   |
| ES6625P | 600X600X250 Stainless 316 #4 1.2mm IP65 | 1   |
| ES6630  | 600X600X300 Stainless 304 #4 1.2mm IP65 | 1   |
| ES6630P | 600X600X300 Stainless 316 #4 1.2mm IP65 | 1   |
| ES664   | 600X600X400 Stainless 304 #4 1.2mm IP65 | 1   |
| ES664P  | 600X600X400 Stainless 316 #4 1.2mm IP65 | 1   |
| ES742   | 700X400X200 Stainless 304 #4 1.2mm IP65 | 1   |
| ES742P  | 700X400X200 Stainless 316 #4 1.2mm IP65 | 1   |
| ES752   | 700X500X200 Stainless 304 #4 1.2mm IP65 | 1   |
| ES752P  | 700X500X200 Stainless 316 #4 1.2mm IP65 | 1   |
| ES7525  | 700X500X250 Stainless 304 #4 1.2mm IP65 | 1   |

PTO for larger sizes >

## Economy Enclosures Stainless Steel Single Door

| # Code   | Product Details                          | Qty |
|----------|--|-----|
| ES7525P  | 700X500X250 Stainless 316 #4 1.2mm IP65  | 1   |
| ES862    | 800X600X200 Stainless 304 #4 1.5mm IP65  | 1   |
| ES862P   | 800X600X200 Stainless 316 #4 1.5mm IP65  | 1   |
| ES8625   | 800X600X250 Stainless 304 #4 1.5mm IP65  | 1   |
| ES8625P  | 800X600X250 Stainless 316 #4 1.5mm IP65  | 1   |
| ES863    | 800X600X300 Stainless 304 #4 1.5mm IP65  | 1   |
| ES863P   | 800X600X300 Stainless 316 #4 1.5mm IP65  | 1   |
| ES883    | 800X800X300 Stainless 304 #4 1.5mm IP65  | 1   |
| ES883P   | 800X800X300 Stainless 316 #4 1.5mm IP65  | 1   |
| ES884    | 800X800X400 Stainless 304 #4 1.5mm IP65  | 1   |
| ES884P   | 800X800X400 Stainless 316 #4 1.5mm IP65  | 1   |
| ES10625  | 1000X600X250 Stainless 304 #4 1.5mm IP65 | 1   |
| ES10625P | 1000X600X250 Stainless 316 #4 1.5mm IP65 | 1   |
| ES1063   | 1000X600X300 Stainless 304 #4 1.5mm IP65 | 1   |
| ES1063P  | 1000X600X300 Stainless 316 #4 1.5mm IP65 | 1   |
| ES1083   | 1000X800X300 Stainless 304 #4 1.5mm IP65 | 1   |
| ES1083P  | 1000X800X300 Stainless 316 #4 1.5mm IP65 | 1   |
| ES1084   | 1000X800X400 Stainless 304 #4 1.5mm IP65 | 1   |
| ES1084P  | 1000X800X400 Stainless 316 #4 1.5mm IP65 | 1   |
| ES12625  | 1200X600X250 Stainless 304 #4 1.5mm IP65 | 1   |
| ES12625P | 1200X600X250 Stainless 316 #4 1.5mm IP65 | 1   |



## Economy Enclosure Powder Coated Single Door



A general-purpose enclosure available in Powder Coated Galvanized Steel.

Economy Enclosure Z275 Galvanized Steel Powder Coated Single Door IP 65.

- Galvanized Z275 3.0mm Heavy Duty Mounting Pan supplied and fitted as standard.
- Made to be compliant with, AS/NZS3000, AS/NZS6002, AS/NZS3439 and AS/NZS3012.
- Standard finish is Powder Coated Grey.
- Manufactured using Australian 1.0-1.5mm Z275 Galvanized Steel Powder Coated.
- Cable entry Gland Plate, Polyurethane seal and fixings supplied in the base.
- Rated IP 65 protection rating.
- Chrome Plated ¼ turn, square drive door lock.
- Flush.
- Earth Strap and M6 Earth Studs supplied.
- Concealed removable Door hinges with removable pins.
- Reversible LH or RH Door with 130 degree opening.
- 3 point locking available for enclosures larger than 800 wide.



### Customisation and Accessories:

- Rain Hoods
- Sun Shields
- Pindle Hinges
- Lift Off Hinges
- T Handle Door Locks
- L Handle Door Locks
- Keyed Knob Locks
- Keyed Flush Locks
- Swing Handle Padlock Kits
- D Handles
- Door Stays
- Plan Holders
- Internal Slotted Din Rail
- External Ventilation Plates
- Pole Mounting Kits
- Galvanized Channel Iron Plinths
- Plinths
- Inner Door Kits
- Escutcheon Covers
- Rack Brackets
- Polycarbonate Door Windows
- Extra Gland Plate for top cable entry
- External Mounting Brackets
- Latch Lugs
- Lifting Lugs
- *Special Sizes made to order*

## Economy Enclosure Powder Coated Single Door

| # Code | Product Details                | Qty |
|--------|--------------------------------|-----|
| EP221  | 200X200X150 PC Grey 1.0mm IP65 | 1   |
| EP321  | 300X200X150 PC Grey 1.0mm IP65 | 1   |
| EP322  | 300X200X200 PC Grey 1.0mm IP65 | 1   |
| EP331  | 300X300X150 PC Grey 1.0mm IP65 | 1   |
| EP332  | 300X300X200 PC Grey 1.0mm IP65 | 1   |
| EP3325 | 300X300X250 PC Grey 1.0mm IP65 | 1   |
| EP431  | 400X300X150 PC Grey 1.0mm IP65 | 1   |
| EP432  | 400X300X200 PC Grey 1.0mm IP65 | 1   |
| EP442  | 400X400X200 PC Grey 1.0mm IP65 | 1   |
| EP541  | 500X400X150 PC Grey 1.0mm IP65 | 1   |
| EP542  | 500X400X200 PC Grey 1.0mm IP65 | 1   |
| EP5425 | 500X400X250 PC Grey 1.0mm IP65 | 1   |
| EP641  | 600X400X150 PC Grey 1.2mm IP65 | 1   |
| EP642  | 600X400X200 PC Grey 1.2mm IP65 | 1   |
| EP6425 | 600X400X250 PC Grey 1.2mm IP65 | 1   |
| EP651  | 600X500X150 PC Grey 1.2mm IP65 | 1   |
| EP652  | 600X500X200 PC Grey 1.2mm IP65 | 1   |
| EP6525 | 600X500X250 PC Grey 1.2mm IP65 | 1   |
| EP6625 | 600X600X250 PC Grey 1.2mm IP65 | 1   |
| EP663  | 600X600X300 PC Grey 1.2mm IP65 | 1   |
| EP664  | 600X600X400 PC Grey 1.2mm IP65 | 1   |
| EP742  | 700X400X200 PC Grey 1.2mm IP65 | 1   |
| EP752  | 700X500X200 PC Grey 1.2mm IP65 | 1   |
| EP7525 | 700X500X250 PC Grey 1.2mm IP65 | 1   |
| EP862  | 800X600X200 PC Grey 1.5mm IP65 | 1   |

| # Code  | Product Details                 | Qty |
|---------|---------------------------------|-----|
| EP8625  | 800X600X250 PC Grey 1.5mm IP65  | 1   |
| EP863   | 800X600X300 PC Grey 1.5mm IP65  | 1   |
| EP883   | 800X800X300 PC Grey 1.5mm IP65  | 1   |
| EP884   | 800X800X400 PC Grey 1.5mm IP65  | 1   |
| EP10625 | 1000X600X250 PC Grey 1.5mm IP65 | 1   |
| EP1063  | 1000X600X300 PC Grey 1.5mm IP65 | 1   |
| EP1083  | 1000X800X300 PC Grey 1.5mm IP65 | 1   |
| EP1084  | 1000X800X400 PC Grey 1.5mm IP65 | 1   |
| EP12625 | 1200X600X250 PC Grey 1.5mm IP65 | 1   |
| EP1263  | 1200X600X300 PC Grey 1.5mm IP65 | 1   |



## Economy Enclosures Stainless Steel Double Door



A general-purpose enclosure available in Stainless Steel. Economy Enclosure 304 and 316 #4 Brushed Stainless Steel Double Door IP 65.

- Galvanized Z275 3.0mm Heavy Duty Mounting Pan supplied and fitted as standard.
- Made to be compliant with, AS/NZS3000, AS/NZS6002, AS/NZS3439 and AS/NZS3012.
- Standard finish is #4 brushed finish.
- Manufactured using Australian 1.0-1.5mm 304 or 316 Stainless Steel.
- Cable entry Gland Plate, Polyurethane seal and fixings supplied in the base.
- Rated IP 65 protection rating.
- Stainless Steel ¼ turn, Square Drive, Door Lock.
- Flush.
- Earth Strap and M6 Earth Studs supplied.
- Concealed removable Door hinges with removable pins.
- Reversible LH or RH Door with 130 degree opening.
- 3-point locking available for enclosures larger than 800 wide.



### Customisation and Accessories:

- Rain Hoods
- Sun Shields
- Pindle Hinges
- Lift Off Hinges
- T Handle Door Locks
- L Handle Door Locks
- Keyed Knob Locks
- Keyed Flush Locks
- Swing Handle Padlock Kits
- D Handles
- Door Stays
- Plan Holders
- Internal Slotted Din Rail
- External Ventilation Plates
- Pole Mounting Kits
- Galvanized Channel Iron Plinths,
- Plinths
- Inner Door Kits
- Escutcheon Covers
- Rack Brackets
- Polycarbonate Door Windows
- Extra Gland Plate for top cable entry
- External Mounting Brackets
- Latch Lugs
- Lifting Lugs
- *Special Sizes made to order*

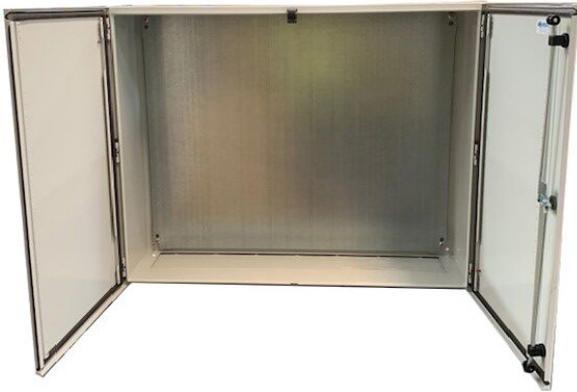
## Economy Enclosures Stainless Steel Double Door

| # Code   | Product Size  | Qty |
|----------|---|-----|
| ES10103  | 1000X1000X300 Stainless 304 #4 2 Door 1.5mm IP65        | 1   |
| ES10103P | 1000X1000X300 Stainless 316 #4 2 Door 1.5mm IP65        | 1   |
| ES10104  | 1000X1000X400 Stainless 304 2 Door 1.5mm IP65           | 1   |
| ES10104P | 1000X1000X400 Stainless 316 2 Door 1.5mm IP65           | 1   |
| ES12103  | 1200X1000X300 Stainless 304 2 Door #4 IP65              | 1   |
| ES12103P | 1200X1000X300 Stainless 316 2 Door #4 IP65              | 1   |
| ES12104  | 1200X1000X400 Stainless 304 #4 2 Door 1.5mm IP65        | 1   |
| ES12104P | 1200X1000X400 Stainless 316 #4 2 Door 1.5mm IP65        | 1   |
| ES12123  | 1200X1200X300 Stainless 2 Door 304 #4 2 Door 1.5mm IP65 | 1   |
| ES12123P | 1200X1200X300 Stainless 2 Door 316 #4 2 Door 1.5mm IP65 | 1   |
| ES12124  | 1200X1200X400 Stainless 2 Door 304 #4 2 Door 1.5mm IP65 | 1   |
| ES12124P | 1200X1200X400 Stainless 2 Door 316 #4 2 Door 1.5mm IP65 | 1   |



# economy enclosure POWDER COATED DOUBLE DOOR

## Economy Enclosure Powder Coated Double Door



A general-purpose enclosure available Powder Coated Galvanized Steel.

Economy Enclosure Z275 Galvanized Steel Powder Coated Double Door IP 65.

- Galvanized Z275 3.0mm Heavy Duty Mounting Pan supplied and fitted as standard.
- Made to be compliant with, AS/NZS3000, AS/NZS6002, AS/NZS3439 and AS/NZS3012.
- Standard finish is Powder Coated Grey.
- Manufactured using Australian 1.0-1.5mm Z275 Galvanized Steel Powder Coated.
- Cable entry Gland Plate, Polyurethane seal and fixings supplied in the base.
- Rated IP 65 protection rating.
- Chrome Plated ¼ turn, square drive door lock.
- Flush.
- Earth Strap and M6 Earth Studs supplied.
- Concealed removable Door hinges with removable pins.
- Reversible LH or RH Door with 130 degree opening.
- 3 point locking available for enclosures larger than 800 wide.



### Customisation and Accessories:

- Rain Hoods
- Sun Shields
- Pindle Hinges
- Lift Off Hinges
- T Handle Door Locks
- L Handle Door Locks
- Keyed Knob Locks
- Keyed Flush Locks
- Swing Handle Padlock Kits
- D Handles
- Door Stays
- Plan Holders
- Internal Slotted Din Rail
- External Ventilation Plates
- Pole Mounting Kits
- Galvanized Channel Iron Plinths
- Plinths
- Inner Door Kits
- Escutcheon Covers
- Rack Brackets
- Polycarbonate Door Windows
- Extra Gland Plate for top cable entry
- External Mounting Brackets
- Latch Lugs
- Lifting Lugs
- *Special Sizes made to order*

## Economy Enclosure Powder Coated Double Door

| # Code  | Product Details                         | Qty |
|---------|---|-----|
| EP10103 | 1000X1000X300 PC Grey 2 Door 1.5mm IP65 | 1   |
| EP10104 | 1000X1000X400 PC Grey 2 Door 1.5mm IP65 | 1   |
| EP12103 | 1200X1000X300 PC Grey 2 Door 1.5mm IP65 | 1   |
| EP12104 | 1200X1000X400 PC Grey 2 Door 1.5mm IP65 | 1   |
| EP12123 | 1200X1200X300 PC Grey 2 Door 1.5mm IP65 | 1   |
| EP12124 | 1200X1200X400 PC Grey 2 Door 1.5mm IP65 | 1   |
| EP1283  | 1200X800X300 PC Grey 2 Door 1.5mm IP65  | 1   |
| EP1284  | 1200X800X400 PC Grey 2 Door 1.5mm IP65  | 1   |



## Rain Hoods



30 degree sloping roof for self-draining manufactured in 1 piece and bolts to existing Economy Enclosure using blind nut-serts to retain PI rating of IP65. Manufactured in Galvanized Z275 Steel, Powder Coated and 304 and 316 #4 Stainless Steel.



| # Code     | Product Details             | Qty |
|------------|-----------------------------|-----|
| ABERH2015P | 200x150 1.2mm Powder Coated | 1   |
| ABERH3015P | 300x150 1.2mm Powder Coated | 1   |
| ABERH3020P | 300x200 1.2mm Powder Coated | 1   |
| ABERH3025P | 300x250 1.2mm Powder Coated | 1   |
| ABERH4015P | 400x150 1.2mm Powder Coated | 1   |
| ABERH4020P | 400x200 1.2mm Powder Coated | 1   |
| ABERH4025P | 400x250 1.2mm Powder Coated | 1   |
| ABERH5015P | 500x150 1.2mm Powder Coated | 1   |
| ABERH5020P | 500x200 1.2mm Powder Coated | 1   |
| ABERH5025P | 500x250 1.2mm Powder Coated | 1   |

| # Code     | Product Details              | Qty |
|------------|------------------------------|-----|
| ABERH6015P | 600x150 1.2mm Powder Coated  | 1   |
| ABERH6020P | 600x200 1.2mm Powder Coated  | 1   |
| ABERH6025P | 600x250 1.2mm Powder Coated  | 1   |
| ABERH6030P | 600x300 1.2mm Powder Coated  | 1   |
| ABERH6040P | 600x400 1.2mm Powder Coated  | 1   |
| ABERH7020P | 700x200 1.2mm Powder Coated  | 1   |
| ABERH7025P | 700x250 1.2mm Powder Coated  | 1   |
| ABERH7030P | 700x300 1.2mm Powder Coated  | 1   |
| ABERH8020P | 800x200 1.5mm Powder Coated  | 1   |
| ABERH8025P | 800x250 1.5mm Powder Coated  | 1   |
| ABERH8030P | 800x300 1.5mm Powder Coated  | 1   |
| ABERH8040P | 800x400 1.5mm Powder Coated  | 1   |
| ABERH1025P | 1000x250 1.5mm Powder Coated | 1   |
| ABERH1030P | 1000x300 1.5mm Powder Coated | 1   |
| ABERH1040P | 1000x400 1.5mm Powder Coated | 1   |
| ABERH1225P | 1200x250 1.5mm Powder Coated | 1   |
| ABERH1230P | 1200x300 1.5mm Powder Coated | 1   |
| ABERH1240P | 1200x400 1.5mm Powder Coated | 1   |

| # Code     | Product Details               | Qty |
|------------|-------------------------------|-----|
| ABERH2015S | 200x150 1.2mm Stainless Steel | 1   |
| ABERH3015S | 300x150 1.2mm Stainless Steel | 1   |
| ABERH3020S | 300x200 1.2mm Stainless Steel | 1   |

More size options on next page >

## Rain Hoods

| # Code     | Product Details                | Qty |
|------------|--------------------------------|-----|
| ABERH3025S | 300x250 1.2mm Stainless Steel  | 1   |
| ABERH4015S | 400x150 1.2mm Stainless Steel  | 1   |
| ABERH4020S | 400x200 1.2mm Stainless Steel  | 1   |
| ABERH4025S | 400x250 1.2mm Stainless Steel  | 1   |
| ABERH5015S | 500x150 1.2mm Stainless Steel  | 1   |
| ABERH5020S | 500x200 1.2mm Stainless Steel  | 1   |
| ABERH5025S | 500x250 1.2mm Stainless Steel  | 1   |
| ABERH6015S | 600x150 1.2mm Stainless Steel  | 1   |
| ABERH6020S | 600x200 1.2mm Stainless Steel  | 1   |
| ABERH6025S | 600x250 1.2mm Stainless Steel  | 1   |
| ABERH6030S | 600x300 1.2mm Stainless Steel  | 1   |
| ABERH6040S | 600x400 1.2mm Stainless Steel  | 1   |
| ABERH7020S | 700x200 1.2mm Stainless Steel  | 1   |
| ABERH7025S | 700x250 1.2mm Stainless Steel  | 1   |
| ABERH7030S | 700x300 1.2mm Stainless Steel  | 1   |
| ABERH8020S | 800x200 1.5mm Stainless Steel  | 1   |
| ABERH8025S | 800x250 1.5mm Stainless Steel  | 1   |
| ABERH8030S | 800x300 1.5mm Stainless Steel  | 1   |
| ABERH8040S | 800x400 1.5mm Stainless Steel  | 1   |
| ABERH1025S | 1000x250 1.5mm Stainless Steel | 1   |
| ABERH1030S | 1000x300 1.5mm Stainless Steel | 1   |
| ABERH1040S | 1000x400 1.5mm Stainless Steel | 1   |
| ABERH1225S | 1200x250 1.5mm Stainless Steel | 1   |
| ABERH1230S | 1200x300 1.5mm Stainless Steel | 1   |
| ABERH1240S | 1200x400 1.5mm Stainless Steel | 1   |

## Sun Shields

Manufactured as an option in extreme climates to be able to insulate the enclosure from the direct sun light if mounted without shade. Suits any enclosure configuration and fitted using M8 bolts and spacers. 50mm spacing between the enclosure and the sunshield. Manufactured in Galvanized Z275 Steel, Powder Coated and 304 and 316 #4 Stainless Steel. Includes M8 x 50 bolts, spacers, sealing washers and dome nuts.



## Sun Shields

| # Code      | Product Details            | Qty |
|-------------|----------------------------|-----|
| ABESS121030 | 1200X1000X300 2 Door 1.5mm | 1   |
| ABESS121040 | 1200X1000X400 2 Door 1.5mm | 1   |
| ABESS121230 | 1200X1200X300 2 Door 1.5mm | 1   |
| ABESS121240 | 1200X1200X400 2 Door 1.5mm | 1   |
| ABESS128030 | 1200X800X300 2 Door 1.5mm  | 1   |
| ABESS128040 | 1200X800X400 2 Door 1.5mm  | 1   |
| ABESS202015 | 200X200X150 1.2mm          | 1   |
| ABESS302015 | 300X200X150 1.2mm          | 1   |
| ABESS302020 | 300X200X200 1.2mm          | 1   |
| ABESS303015 | 300X300X150 1.2mm          | 1   |
| ABESS303020 | 300X300X200 1.2mm          | 1   |
| ABESS303025 | 300X300X250 1.2mm          | 1   |
| ABESS403015 | 400X300X150 1.2mm          | 1   |
| ABESS403020 | 400X300X200 1.2mm          | 1   |
| ABESS404020 | 400X400X200 1.2mm          | 1   |
| ABESS504015 | 500X400X150 1.2mm          | 1   |
| ABESS504020 | 500X400X200 1.2mm          | 1   |
| ABESS504025 | 500X400X250 1.2mm          | 1   |
| ABESS604015 | 600X400X150 1.2mm          | 1   |
| ABESS604020 | 600X400X200 1.2mm          | 1   |
| ABESS604025 | 600X400X250 1.2mm          | 1   |
| ABESS605015 | 600X500X150 1.2mm          | 1   |
| ABESS605020 | 600X500X200 1.2mm          | 1   |
| ABESS605025 | 600X500X250 1.2mm          | 1   |
| ABESS606025 | 600X600X250 1.2mm          | 1   |

| # Code      | Product Details            | Qty |
|-------------|----------------------------|-----|
| ABESS60603  | 600X600X300 1.2mm          | 1   |
| ABESS606040 | 600X600X400 1.2mm          | 1   |
| ABESS704020 | 700X400X200 1.2mm          | 1   |
| ABESS705020 | 700X500X200 1.2mm          | 1   |
| ABESS705025 | 700X500X250 1.2mm          | 1   |
| ABESS806020 | 800X600X200 1.5mm          | 1   |
| ABESS806025 | 800X600X250 1.5mm          | 1   |
| ABESS806030 | 800X600X300 1.5mm          | 1   |
| ABESS808030 | 800X800X300 1.5mm          | 1   |
| ABESS808040 | 800X800X400 1.5mm          | 1   |
| ABESS106025 | 1000X600X250 1.5mm         | 1   |
| ABESS106030 | 1000X600X300 1.5mm         | 1   |
| ABESS108030 | 1000X800X300 1.5mm         | 1   |
| ABESS108040 | 1000X800X400 1.5mm         | 1   |
| ABESS126025 | 1200X600X250 1.5mm         | 1   |
| ABESS126030 | 1200X600X300 1.5mm         | 1   |
| ABESS101030 | 1000X1000X300 2 Door 1.5mm | 1   |
| ABESS101040 | 1000X1000X400 2 Door 1.5mm | 1   |

Pindle Hinges



| # Code   | Product Details                               | Qty |
|----------|---|-----|
| ABAD81   | Pindle Hinge 80mm Brass Chrome Plated         | 1   |
| ABAD82   | Pindle Hinge 50mm Brass Chrome Plated         | 1   |
| ABAD83   | Pindle Hinge 80mm Brass Chrome Plated         | 1   |
| ABAD831  | Pindle Hinge 80mm Brass Chrome Plated         | 1   |
| ABCL2041 | Pindle Hinge 80mm Zinc Die Cast Nickel Plated | 1   |
| ABAD81SS | Pindle Hinge 80mm Stainless                   | 1   |

Stylish design to give a finished look. Manufactured in 316 Stainless and Chrome Plated. Includes screws. Other hinges available upon request.



Lift Off Hinges



| # Code   | Product Details                                   | Qty |
|----------|---|-----|
| AB96LS   | Lift Off Hinge Black Powder Coated Zinc in line   | 1   |
| AB96LRH  | Lift Off Hinge Black Powder Coated Zinc RH Offset | 1   |
| AB96LLH  | Lift Off Hinge Black Powder Coated Zinc LH Offset | 1   |
| AB901442 | Lift Off Hinge Black Stainless Right Hand         | 1   |
| AB901443 | Lift Off Hinge Black Stainless Left Hand          | 1   |

Allows for quick, easy door removal. Can also be permanently installed. Manufactured in Zinc Alloy, Black Chrome, Bright Chrome and 316 Stainless Steel Finish. Other hinges available upon request.



## T Handle Door Locks Large



| # Code        | Product Details                                    | Qty |
|---------------|--|-----|
| ABTHF100-1A   | T Handle Front Fixing Keyed KA92268 Anti-Clockwise | 1   |
| ABTHF100-1A18 | T Handle Front Fixing Keyed KA92268 Anti-Clockwise | 1   |
| ABTHF100-1C   | T Handle Front Fixing Keyed KA92268 Clockwise      | 1   |
| ABTHR100-1A   | T Handle Rear Fixing Keyed KA92268 Anti-Clockwise  | 1   |
| ABTHR100-1C   | T Handle Rear Fixing Keyed KA92268 Clockwise       | 1   |

Internal or external fixing and keyed KA92268 or non-keyed with clockwise or anti-clockwise opening. Material is steel with chrome plated finish.

## T Handle Door Locks Small



| # Code      | Product Details                                    | Qty |
|-------------|--|-----|
| ABTHF60-1A  | T Handle Front Fixing Keyed KA92268 Anti-Clockwise | 1   |
| ABTHF60-1C  | T Handle Front Fixing Keyed KA92268 Clockwise      | 1   |
| ABTHR60-1A  | T Handle Rear Fixing Keyed KA92268 Anti-Clockwise  | 1   |
| ABTHR60-1C  | T Handle Rear Fixing Keyed KA92268 Clockwise       | 1   |
| ABTHR60-NLA | T Handle Rear Fixing Non-Locking Anti-Clockwise    | 1   |
| ABTHR60-NLC | T Handle Rear Fixing Non-Locking Clockwise         | 1   |

Internal or external fixing and keyed KA92268 or non-keyed with clockwise or anti-clockwise opening. Material is steel with chrome plated finish.

## L Handle Door Locks



| # Code       | Product Details                                    | Qty |
|--------------|--|-----|
| ABLHF115-1A  | L Handle Front Fixing Keyed KA92268 Anti-Clockwise | 1   |
| ABLHF115-1C  | L Handle Front Fixing Keyed KA92268 Anti-Clockwise | 1   |
| ABLHR115-1A  | L Handle Rear Fixing Keyed KA92268 Anti-Clockwise  | 1   |
| ABLHR115-1C  | L Handle Rear Fixing Keyed KA92268 Anti-Clockwise  | 1   |
| ABLHF115-NLA | L Handle Front Fixing Keyed KA92268 Anti-Clockwise | 1   |
| ABLHF115-NLC | L Handle Front Fixing Keyed KA92268 Anti-Clockwise | 1   |
| ABLHP115-75  | L Handle Rear Fixing Padlockable                   | 1   |
| ABLHPB-AC    | L Handle Padlockable Bracket Anti-Clockwise        | 1   |
| ABLHPB-C     | L Handle Padlockable Bracket Clockwise             | 1   |

Internal fixing and keyed or non-keyed with clockwise opening.  
Material is steel with chrome plated finish.

## 1/4 Turn Wing Knob Locks



| # Code         | Product Details                  | Qty |
|----------------|----------------------------------|-----|
| ABASR18W63SHSC | Quarter Turn Wing Knob           | 1   |
| ABAHWT013SHSC  | Quarter Turn Wing Knob Keyed 268 | 1   |

Quarter turn latch. Made in Zinc plated, and black powder coated. Rated IP65





## Keyed flush locks



| # Code         | Product Details                     | Qty |
|----------------|-------------------------------------|-----|
| ABASP18013CHSC | Keyed 268 Chrome Quarter Turn Flush | 1   |

Keyed Flush Lock 268 Chrome 20mm 1/4 Turn.

Spanner Lock`18mm Stainless



| Stainless      |                                   |     |
|----------------|-----------------------------------|-----|
| # Code         | Product Details                   | Qty |
| ABASR187SSSHT2 | 7mm Square Drive (Comes Standard) | 1   |
| ABASR188DSSHT2 | 8mm Square Drive 2mm slot         | 1   |
| ABASR188SSSHT2 | 8mm Square Drive                  | 1   |
| ABASR188TSSHT2 | 8mm Triangle Drive                | 1   |
| ABASR18DSSSHT2 | 2mm Driver Slot                   | 1   |

316 Stainless Steel finish. Different Barrel Inserts, 7mm Square, 8mm Square (2mm slot), 8mm Square, 8mm Triangle, 2mm Slotted Head.

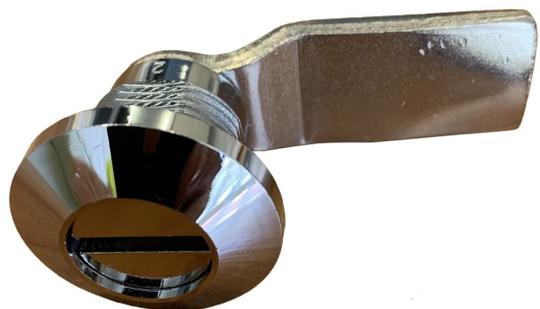


Spanner Lock`18mm



| # Code         | Product Details                   | Qty |
|----------------|-----------------------------------|-----|
| ABASR187S3SHSC | 7mm Square Drive (Comes Standard) | 1   |
| ABASR183P3SHSC | 3mm Pin Drive                     | 1   |
| ABASR185P3SHSC | 5mm Pin Drive                     | 1   |
| ABASR187F3SHSC | 7mm Female Square Drive           | 1   |
| ABASR188D3SHSC | 8mm Square 2mm Slot Drive         | 1   |
| ABASR188S3SHSC | 8mm Square Drive                  | 1   |
| ABASR188T3SHSC | 8mm Triangle Drive                | 1   |
| ABASR18DS3SHSC | 2mm Driver Slot                   | 1   |

Chrome Plated finish. Different Barrel Inserts, 3mm Pin, 5mm Pin, 7mm Female Square, 7mm Square, 8mm Square (2mm slot), 8mm Square, 8mm Triangle, 2mm Slotted Head.



Spanner Lock Keys



| # Code     | Product Details         | Qty |
|------------|-------------------------|-----|
| ABZDKEY7S1 | Latch Key 7 mm Square   | 1   |
| ABZDKEY8T1 | Latch Key 8 mm Triangle | 1   |
| ABZDKEY8S1 | Latch Key 8 mm Square   | 1   |
| ABZDKEY3P1 | Latch Key 3 mm Pin      | 1   |
| ABZDKEY5P1 | Latch Key 5 mm Pin      | 1   |





## ACCESSORIES DETAILS - SWING HANDLE KEYED AND PAD LOCK KITS

### Swing Handle Keyed and Pad Lock Kits



| # Code       | Product Details                             | Qty |
|--------------|---|-----|
| ABSHL160SS1  | Lock Swing Handle Key 92268 Stainless 316   | 1   |
| ABSHB142CPE1 | Lock Swing Handle Key 92268 Chrome          | 1   |
| ABSHP142CP   | Lock Swing Handle Padlockable Chrome        | 1   |
| ABSHP142BC   | Lock Swing Handle Padlock Black Chrome      | 1   |
| ABSHP142SS   | Lock Swing Handle Padlockable Stainless 316 | 1   |

Can be used with 3 Point Locking system. Comes in Black Chrome, 316 Stainless and Chrome Plated finishes. Keyed 92268 or non-keyed.



## D Handles



| # Code        | Product Details                        | Qty |
|---------------|--|-----|
| ABLS507-S75   | D Handle Stainless 75mm M5             | 1   |
| ABLS507-S100  | D Handle Stainless 100mm M5            | 1   |
| ABLS511-A75   | D Handle Zinc Die Cast Chrome 75mm M5  | 1   |
| ABLS511-A100  | D Handle Zinc Die Cast Chrome 100mm M5 | 1   |
| 161.20106.001 | D Handle Plastic 16mm x 96mm White     | 1   |



Door handles manufactured in 316 Stainless, Zinc Die Cast Chrome Plated and Plastic.



Door Stays



| # Code    | Product Details                    | Qty |
|-----------|------------------------------------|-----|
| AB542104  | M/Box Door Stay Zinc               | 1   |
| AB543004  | M/Box Door Stay Compact Stainless  | 1   |
| ABDS180SS | M/Box Door Stay Standard Stainless | 1   |

Heavy duty door retainer. Automatically locks at the open-end position. Left- or right-hand application. Can be retained with an opening angle of 90-degree, 105-degree, 120-degree and 135-degrees.



### 3 Point Locking



| # Code   | Product Details                    | Qty |
|----------|------------------------------------|-----|
| AB283018 | 3 Point Locking Door 304 Stainless | 1   |
| AB282114 | 3 Point Locking Door Zinc Plated   | 1   |

Suitable for larger enclosures to retain the top, center and bottom of the door. Manufactured in Stainless and Zinc.



Document Holders



| # Code  | Product Details                      | Qty |
|---------|--------------------------------------|-----|
| ABMBDH  | Document Holder A4 260x205 Galv      | 1   |
| ABMBDHS | Document Holder A4 260x205 Stainless | 1   |

A4 Sized (260x205) holder mounted on the inside of the door of enclosures larger than 400sq to retain electricians required documents relevant to the enclosure.



Internal Slotted Din Rail



| # Code  | Product Details                             | Qty |
|---------|---|-----|
| ABIDR3  | Slotted Din Rail Suit 300mm wide Enclosure  | 1   |
| ABIDR4  | Slotted Din Rail Suit 400mm wide Enclosure  | 1   |
| ABIDR5  | Slotted Din Rail Suit 500mm wide Enclosure  | 1   |
| ABIDR6  | Slotted Din Rail Suit 600mm wide Enclosure  | 1   |
| ABIDR7  | Slotted Din Rail Suit 700mm wide Enclosure  | 1   |
| ABIDR8  | Slotted Din Rail Suit 800mm wide Enclosure  | 1   |
| ABIDR10 | Slotted Din Rail Suit 1000mm wide Enclosure | 1   |
| ABIDR12 | Slotted Din Rail Suit 1200mm wide Enclosure | 1   |



External Vent Plates



| # Code    | Product Details                    | Qty |
|-----------|------------------------------------|-----|
| ABMBLV12  | Louvre Vent Plates 120SQ Galv      | 1   |
| ABMBLV12S | Louvre Vent Plates 120SQ Stainless | 1   |
| ABMBLV22  | Louvre Vent Plates 220SQ Galv      | 1   |
| ABMBLV22S | Louvre Vent Plates 220SQ Stainless | 1   |



Pole Mounting Kits



| # Code  | Product Details                                    | Qty |
|---------|--|-----|
| ABMBST1 | Enclosure Stand 2x50sq RHS poles Inc. Cover Plates | 1   |
| ABTPST  | Temporary Power Stand Pair Galv LH RH              | 1   |



## Galvanized Channel Iron Plinths



| # Code    | Product Details                                 | Qty |
|-----------|---|-----|
| ABECP4020 | Hot Dip Galvanized Channel Plinth 400x200 3.0mm | 1   |
| ABECP4025 | Hot Dip Galvanized Channel Plinth 400x250 3.0mm | 1   |
| ABECP5020 | Hot Dip Galvanized Channel Plinth 500x200 3.0mm | 1   |
| ABECP5025 | Hot Dip Galvanized Channel Plinth 500x250 3.0mm | 1   |
| ABECP6020 | Hot Dip Galvanized Channel Plinth 600x200 3.0mm | 1   |
| ABECP6025 | Hot Dip Galvanized Channel Plinth 600x250 3.0mm | 1   |
| ABECP3030 | Hot Dip Galvanized Channel Plinth 300x300 3.0mm | 1   |
| ABECP6040 | Hot Dip Galvanized Channel Plinth 600x400 3.0mm | 1   |
| ABECP7020 | Hot Dip Galvanized Channel Plinth 700x200 3.0mm | 1   |
| ABECP7025 | Hot Dip Galvanized Channel Plinth 700x250 3.0mm | 1   |
| ABECP7030 | Hot Dip Galvanized Channel Plinth 700x300 3.0mm | 1   |
| ABECP8020 | Hot Dip Galvanized Channel Plinth 800x200 3.0mm | 1   |
| ABECP8025 | Hot Dip Galvanized Channel Plinth 800x250 3.0mm | 1   |
| ABECP8030 | Hot Dip Galvanized Channel Plinth 800x300 3.0mm | 1   |

| # Code    | Product Details                                  | Qty |
|-----------|--|-----|
| ABECP8040 | Hot Dip Galvanized Channel Plinth 800x400 3.0mm  | 1   |
| ABECP1025 | Hot Dip Galvanized Channel Plinth 1000x250 3.0mm | 1   |
| ABECP1030 | Hot Dip Galvanized Channel Plinth 1000x300 3.0mm | 1   |
| ABECP1040 | Hot Dip Galvanized Channel Plinth 1000x400 3.0mm | 1   |
| ABECP1225 | Hot Dip Galvanized Channel Plinth 1200x250 3.0mm | 1   |
| ABECP1230 | Hot Dip Galvanized Channel Plinth 1200x300 3.0mm | 1   |
| ABECP1240 | Hot Dip Galvanized Channel Plinth 1200x400 3.0mm | 1   |

Heavier gauge Plinth of various sizes but lower profile (70mm height) to suit the economy enclosure required. Manufactured using Australian Standard Black Mild Steel and then Hot Dip Galvanized.

## Plinths



| # Code   | Product Details                         | Qty |
|----------|---|-----|
| ABEP1225 | Economy Enclosure Plinth 1200x250 1.2mm | 1   |
| ABEP1230 | Economy Enclosure Plinth 1200x300 1.2mm | 1   |
| ABEP4020 | Economy Enclosure Plinth 1200x400 1.2mm | 1   |

Lighter gauge Plinths of various sizes and heights to suit the economy enclosure required. These include cable access top and bottom. Manufactured using Australian Standard Galvanized Z275, Powder Coated or 304 and 316 #4 Brushed Stainless.

| # Code   | Product Details                         | Qty |
|----------|---|-----|
| ABEP4020 | Economy Enclosure Plinth 400x200 1.2mm  | 1   |
| ABEP4025 | Economy Enclosure Plinth 400x250 1.2mm  | 1   |
| ABEP5020 | Economy Enclosure Plinth 500x200 1.2mm  | 1   |
| ABEP5025 | Economy Enclosure Plinth 500x250 1.2mm  | 1   |
| ABEP6020 | Economy Enclosure Plinth 600x200 1.2mm  | 1   |
| ABEP6025 | Economy Enclosure Plinth 600x250 1.2mm  | 1   |
| ABEP3030 | Economy Enclosure Plinth 300x300 1.2mm  | 1   |
| ABEP6040 | Economy Enclosure Plinth 600x400 1.2mm  | 1   |
| ABEP7020 | Economy Enclosure Plinth 700x200 1.2mm  | 1   |
| ABEP7025 | Economy Enclosure Plinth 700x250 1.2mm  | 1   |
| ABEP7030 | Economy Enclosure Plinth 700x300 1.2mm  | 1   |
| ABEP8020 | Economy Enclosure Plinth 800x200 1.2mm  | 1   |
| ABEP8025 | Economy Enclosure Plinth 800x250 1.2mm  | 1   |
| ABEP8030 | Economy Enclosure Plinth 800x300 1.2mm  | 1   |
| ABEP8040 | Economy Enclosure Plinth 800x400 1.2mm  | 1   |
| ABEP1025 | Economy Enclosure Plinth 1000x250 1.2mm | 1   |
| ABEP1030 | Economy Enclosure Plinth 1000x300 1.2mm | 1   |
| ABEP1040 | Economy Enclosure Plinth 1000x400 1.2mm | 1   |

**Inner Door and Escutcheon Kits**



Designed to fit internally any standard Economy Enclosure. Simply bolts up to the 4 mounting studs located inside the enclosure. Comes with slotted mounting brackets to allow adjustment internally. Some enclosures may need modifications to accommodate installation of the kits. Each kit includes Polyamide hinges with counter sunk holes, nuts, washers and bolts.



| # Code     | Product Details                             | Qty |
|------------|---|-----|
| ABMBEDK32  | Escutcheon Door Kit 300 X 200 1.2 PC White  | 1   |
| ABMBEDK33  | Escutcheon Door Kit 300 X 300 1.2 PC White  | 1   |
| ABMBEDK34  | Escutcheon Door Kit 300 X 400 1.2 PC White  | 1   |
| ABMBEDK43  | Escutcheon Door Kit 400 X 300 1.2 PC White  | 1   |
| ABMBEDK44  | Escutcheon Door Kit 400 X 400 1.2 PC White  | 1   |
| ABMBEDK46  | Escutcheon Door Kit 400 X 600 1.2 PC White  | 1   |
| ABMBEDK54  | Escutcheon Door Kit 500 X 400 1.2 PC White  | 1   |
| ABMBEDK55  | Escutcheon Door Kit 500 X 500 1.2 PC White  | 1   |
| ABMBEDK64  | Escutcheon Door Kit 600 X 400 1.2 PC White  | 1   |
| ABMBEDK65  | Escutcheon Door Kit 600 X 500 1.5 PC White  | 1   |
| ABMBEDK66  | Escutcheon Door Kit 600 X 600 1.5 PC White  | 1   |
| ABMBEDK86  | Escutcheon Door Kit 800 X 600 1.5 PC White  | 1   |
| ABMBEDK88  | Escutcheon Door Kit 800 X 800 1.5 PC White  | 1   |
| ABMBEDK106 | Escutcheon Door Kit 1000 X 600 1.5 PC White | 1   |
| ABMBEDK108 | Escutcheon Door Kit 1000 X 800 1.5 PC White | 1   |
| ABMBEDK126 | Escutcheon Door Kit 1200 X 600 1.5 PC White | 1   |
| ABMBEDK128 | Escutcheon Door Kit 1200 X 800 1.5 PC White | 1   |



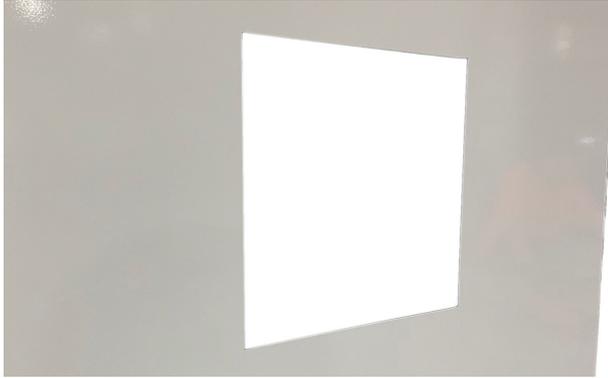
## 19" Data Rack Brackets



| # Code  | Product Details                                   | Qty |
|---------|---|-----|
| ABEDR6  | Economy 19" Data Rack suit any 600 high enclosure | 1   |
| ABEDR8  | Economy 19" Data Rack suit any 800 high enclosure | 1   |
| ABEDR10 | Economy 19" Data Rack suit 1000 high enclosure    | 1   |
| ABEDR12 | Economy 19" Data Rack suit 1200 high enclosure    | 1   |

The 19" Data Rack Brackets are designed to fit any height Enclosure but ONLY 600mm wide Economy Enclosures. The racks come as a pair and bolt to the 4 studs located in the enclosure and are slotted to allow some depth adjustment. Manufactured using 1.6mm Z275 Galvanized Steel and powder coated Bright White.

## Polycarbonate Door Windows



| # Code   | Product Details                              | Qty |
|----------|--|-----|
| ABMBW32  | Polycarbonate Door Window suit 300x200 door  | 1   |
| ABMBW33  | Polycarbonate Door Window suit 300x300 door  | 1   |
| ABMBW43  | Polycarbonate Door Window suit 400x300 door  | 1   |
| ABMBW44  | Polycarbonate Door Window suit 400x400 door  | 1   |
| ABMBW54  | Polycarbonate Door Window suit 500x400 door  | 1   |
| ABMBW55  | Polycarbonate Door Window suit 500x500 door  | 1   |
| ABMBW64  | Polycarbonate Door Window suit 600x400 door  | 1   |
| ABMBW65  | Polycarbonate Door Window suit 600x500 door  | 1   |
| ABMBW66  | Polycarbonate Door Window suit 600x600 door  | 1   |
| ABMBW86  | Polycarbonate Door Window suit 800x600 door  | 1   |
| ABMBW88  | Polycarbonate Door Window suit 800x800 door  | 1   |
| ABMBW106 | Polycarbonate Door Window suit 1000x600 door | 1   |
| ABMBW108 | Polycarbonate Door Window suit 1000x800 door | 1   |
| ABMBW126 | Polycarbonate Door Window suit 1200x600 door | 1   |

| # Code     | Product Details                                      | Qty |
|------------|--|-----|
| ABMBW128   | Polycarbonate Door Window suit 1200x800 door         | 1   |
| ABMBW1010D | Polycarbonate Door Window suit 1000x1000 Double door | 1   |
| ABMBW128D  | Polycarbonate Door Window suit 1200x800 Double door  | 1   |
| ABMBW1210D | Polycarbonate Door Window suit 1200x1000 Double door | 1   |
| ABMBW1212D | Polycarbonate Door Window suit 1200x1200 Double door | 1   |

Clear 5.0mm Polycarbonate viewing window secured on the inside of the door using 3M VHB Double Sided Extreme Strength 0.6 mm Tape. Comes in 17 different standard sizes.

## Extra Gland Plates for top cable entry



| # Code   | Product Details                               | Qty |
|----------|---|-----|
| ABGP3015 | Enclosure Gland Plate 300 X 150 Aluminium 3.0 | 1   |
| ABGP3020 | Enclosure Gland Plate 300 X 200 Aluminium 3.0 | 1   |
| ABGP4015 | Enclosure Gland Plate 400 X 150 Aluminium 3.0 | 1   |
| ABGP4020 | Enclosure Gland Plate 400 X 200 Aluminium 3.0 | 1   |
| ABGP5015 | Enclosure Gland Plate 500 X 150 Aluminium 3.0 | 1   |
| ABGP5020 | Enclosure Gland Plate 500 X 200 Aluminium 3.0 | 1   |
| ABGP6015 | Enclosure Gland Plate 600 X 150 Aluminium 3.0 | 1   |
| ABGP6020 | Enclosure Gland Plate 600 X 200 Aluminium 3.0 | 1   |

Gland Plates of various sizes to fit most Economy Enclosures. The Gland Plates are supplied with polyurethane seal to maintain the IP rating and are pre-punched to be able to mount using supplied stainless bolts, nuts and washers.

## Lifting Lugs



| # Code   | Product Details                      | Qty |
|----------|--------------------------------------|-----|
| ABMBLLMS | Lifting Lug suit Enclosure MS        | 1   |
| ABMBLLSS | Lifting Lug suit Enclosure Stainless | 1   |

Lifting lugs designed to lift more than the weight of the specified economy enclosure. Each lug is fixed to the enclosure roof section using 2 x M10 bolts and nut-serted opposite the direction of lift for added strength.

## Termination Enclosures Rated IP66, Powder coated or Stainless Steel



This TB range of enclosures is designed for applications, where a smaller enclosure with an IP66 rating and a screwed-on lid is required, while maintaining the same features in strength, quality and protection against corrosion as in the Economy range.

### Features:

- Manufactured from 1.0mm Powder Coated Galva bond Z275 zinc coated steel and Australian Grade 316 Marine Grade Stainless Steel.
- Fully welded reinforced corners for greater strength.
- Standard finish is Powder Coated Grey.
- Lid secured with non-corrosive screws indented into the lid and held captive with rubber washers.
- IP 66 protection rating.
- Rubber seal incorporating spring steel clamping for superior dust proofing.

### Standard equipment with each enclosure:

- Galvanised mounting pan, mounting brackets with bolts and nuts.
- Earth strap with nuts and washers and DIN rail.
- Industrial 3 Phase Enclosures Descriptions.

In compliance with AS3000, AS3439.1 and Utilities Services & Installation Rules.





# TERMINATION ENCLOSURES RATED IP66, POWDER COATED OR STAINLESS STEEL

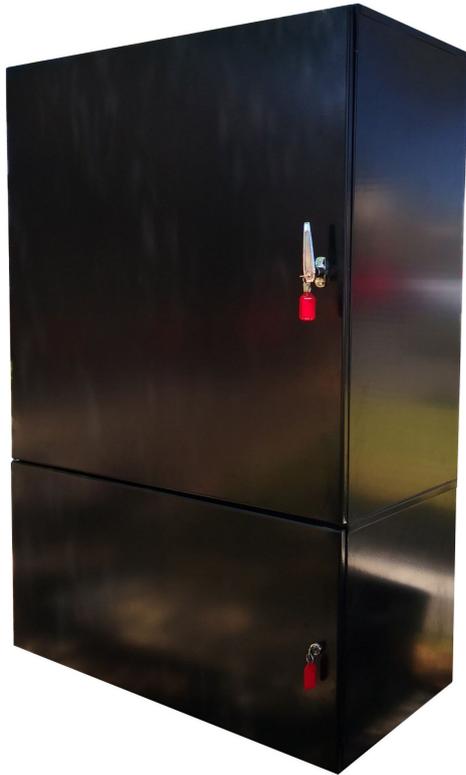
## Termination Enclosures Rated IP66, Powder coated or Stainless Steel

| Z275 Powder Coated |  |     |
|--------------------|--|-----|
| # Code             | Product Details                          | Qty |
| ABTB151512P        | 150 x 150 x 120 IP66 Rated Powder Coated | 1   |
| ABTB202012P        | 200 x 200 x 120 IP66 Rated Powder Coated | 1   |
| ABTB301512P        | 300 x 150 x 120 IP66 Rated Powder Coated | 1   |
| ABTB302012P        | 300 x 200 x 120 IP66 Rated Powder Coated | 1   |
| ABTB303012P        | 300 x 300 x 120 IP66 Rated Powder Coated | 1   |
| ABTB402012P        | 400 x 200 x 120 IP66 Rated Powder Coated | 1   |
| ABTB403012P        | 400 x 300 x 120 IP66 Rated Powder Coated | 1   |
| ABTB602012P        | 600 x 200 x 120 IP66 Rated Powder Coated | 1   |
| ABTB603012P        | 600 x 300 x 120 IP66 Rated Powder Coated | 1   |
| ABTB404012P        | 400 x 400 x 120 IP66 Rated Powder Coated | 1   |
| ABTB15158P         | 150 x 150 x 80 IP66 Rated Powder Coated  | 1   |
| ABTB30158P         | 300 x 150 x 80 IP66 Rated Powder Coated  | 1   |
| ABTB20208P         | 200 x 200 x 80 IP66 Rated Powder Coated  | 1   |
| ABTB30208P         | 300 x 200 x 80 IP66 Rated Powder Coated  | 1   |
| ABTB40208P         | 400 x 200 x 80 IP66 Rated Powder Coated  | 1   |
| ABTB40308P         | 400 x 300 x 80 IP66 Rated Powder Coated  | 1   |

| 316 Stainless Steel |                                      |     |
|---------------------|--------------------------------------|-----|
| # Code              | Product Details                      | Qty |
| ABTB15158S          | 150 x 150 x 80 IP66 Rated Stainless  | 1   |
| ABTB151512S         | 150 x 150 x 120 IP66 Rated Stainless | 1   |
| ABTB30158S          | 300 x 150 x 80 IP66 Rated Stainless  | 1   |
| ABTB301512S         | 300 x 150 x 120 IP66 Rated Stainless | 1   |
| ABTB20208S          | 200 x 200 x 80 IP66 Rated Stainless  | 1   |
| ABTB202012S         | 200 x 200 x 120 IP66 Rated Stainless | 1   |
| ABTB30208S          | 300 x 200 x 80 Stainless             | 1   |
| ABTB302012S         | 300 x 200 x 120 Stainless            | 1   |
| ABTB30308S          | 300 x 300 x 80 Stainless             | 1   |
| ABTB303012S         | 300 x 300 x 120 Stainless            | 1   |
| ABTB40208S          | 400 x 200 x 80 Stainless             | 1   |
| ABTB402012S         | 400 x 200 x 120 Stainless            | 1   |
| ABTB40308S          | 400 x 300 x 80 Stainless             | 1   |
| ABTB403012S         | 400 x 300 x 120 Stainless            | 1   |



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- Galvanised protection cages in any size
- Customer's Support Poles as specified by SAPN Guide for Customer's support poles
- Guillotining, bending, punching, welding, CNC Turret Punching and CNC Plasma Cutting

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The attractive and hygienic surface appearance of Stainless steel products cannot be regarded as completely maintenance free. All grades and finishes of Stainless steel may in fact stain, discolour or attain an adhering layer of grime in normal service. To achieve maximum corrosion resistance the surface of the Stainless steel must be kept clean.

Provided the grade, condition and surface finish were correctly selected for the particular service environment, fabrication and installation procedures were correct and that cleaning schedules are carried out regularly, good performance and long life will be achieved. Frequency and cost of cleaning of Stainless steel is lower than for many other materials and this will often out-weigh higher acquisition costs.

## Why Maintenance is Necessary

Surface contamination and the formation of deposits are critical factors which may lead to drastically reduced life. These contaminants may be minute particles of iron or rust from other non-Stainless steels used in nearby construction and not subsequently removed. Industrial, commercial and even domestic and naturally occurring atmospheric conditions can result in deposits which can be quite corrosive. An example is salt deposits from marine conditions.

Working environments can also create more aggressive conditions, such as the warm, high humidity atmosphere above indoor swimming pools. This particular environment has in a small number of instances been found to be highly aggressive, and specialist advice should be obtained.

Aggressive operating environments can increase the speed of corrosion and therefore require more frequent maintenance. Modern processes use many cleaners, sterilizers and bleaches for hygienic purposes. These proprietary solutions, if appropriate for use with Stainless steel and when used in accordance with their makers' instructions are safe, but if used incorrectly (e.g. warm or concentrated) can cause discolouration and corrosion on the surface of Stainless steels.

## Maintenance during Installation

Cleaning of new fabrications should present no special problems, although more attention may be required where surface contamination is suspected, immediate attention

to cleaning will promote a trouble-free service life. Food handling, pharmaceutical and aerospace applications may require extremely high levels of cleanliness. Installation period has been prolonged.

## On-Going Maintenance

Advice is often sought concerning the frequency of cleaning of products made of Stainless steel, and the answer is quite simply "clean the metal when it is dirty in order to restore its original appearance". A rule of thumb for many exterior building installations is to clean the Stainless steel whenever the nearby glass needs cleaning.

This may vary from one to four times a year for external applications or it may be once a day for an item in hygienic or aggressive situations. In many applications the cleaning frequency is after each use. Suggested cleaning intervals are as in this table – these should be modified by experience. Note that natural rain is an effective cleaner – those items that are not washed by rain water may need more frequent maintenance cleaning.

## Good Housekeeping during Manufacture

Stainless steel can be contaminated by pick-up of carbon steel ("free iron") and this is likely to lead to rapid localized corrosion. The ideal is to have workshops and machinery dedicated to only Stainless steel work, but in a workshop also processing other steels avoid pick-up from:

- Tooling used with other metals
- Steel storage racks
- Handling Equipment
- Grinding wheels, wire brushes, finishing belts
- Contamination by grinding or welding sparks from adjacent carbon steel fabrication

## Cleaning Methods

Sections below give passivation treatments for removal of free iron and other contamination resulting from handling, fabrication, or exposure to contaminated atmospheres, and pickling treatments for removal of high temperature scale from heat treatment or welding operations.

### Passivation Treatments

- Grades with at least 16% chromium (except free machining grade such as 303): 20-50% nitric acid, at room temperature to 40oC for 30-60 minutes.
- Grades with less than 16% chromium (except free machining grades such as 416): 20-50% nitric acid, at room temperature to 40oC for 60 minutes.
- Free machining grades such as 303, 416 and 430F: 20-50% nitric acid + 2-6% sodium dichromate, at room temperature to 50oC for 25 - 40 minutes.

### Pickling Treatments

- All Stainless steels (except free machining grades): 8-11% sulphuric acid, at 65 to 80oC for 5-45 minutes.
- Grades with at least 16% chromium (except free machining grades): 15-25% nitric acid + 1-8% hydrofluoric acid, at 20 to 60oC for 5-30 minutes.
- Free machining grades and grades with less than 16% chromium such as 303, 410 and 416: 10-15% nitric acid + 0.5-1.5% hydrofluoric acid, at 20 to 60oC for 5-30 minutes.

“Pickling Paste” is a commercial product of hydrofluoric and nitric acids in a thickener - this is useful for pickling welds and spot contamination, even on vertical and overhanging surfaces.

### Recommendations for Cleaning of Specific Products

Stainless steel is easy to clean compared to many other materials. Washing with soap or a mild detergent and warm water followed by a clean water rinse is usually quite adequate for domestic and architectural equipment. An enhanced appearance will be achieved if the cleaned surface is finally wiped dry. Specific methods of cleaning are as in the table on the next page.

These are recommendations only, and it must be recognized that there are risks associated with all cleaning operations. All such treatments must be evaluated by the user.

### \* Precautions

#### Acids:

Should only be handled using personal protective equipment as detailed in relevant MSDS and other product-specific information. Care must be taken that acids are not spilled over adjacent areas. All residues must be flushed to a treated waste stream (refer to local water authorities for regulations and assistance). Always dilute by adding acid to water, not water to acid. Use acid-resistant containers, such as glass or plastics.

If no dulling of the surface can be tolerated a trial treatment should be carried out; especially for pickling operations. All treatments must be followed by thorough rinsing.

#### Solvents:

Should not be used in confined spaces. Smoking must be avoided when using solvents.

#### Chlorides:

Are present in many cleaning agents. This entails risk of pitting corrosion of Stainless steel. If a cleaner containing chlorine, chlorides, bleaches or hypochlorites is used it must be afterwards promptly and thoroughly cleaned off.

| PROBLEM   | CLEANING AGENT   | COMMENTS   |
|---|--|--|
| <b>Routine cleaning all finishes.</b>                                       | Soap or mild detergent and water. (preferably warm).   | Sponge, rinse with clean water, wipe dry if necessary. Follow polish lines.  |
| <b>Fingerprints All finishes.</b>   | Soap and warm water or organic solvent (eg. acetone, alcohol, methylated spirits).   | Rinse with clean water and wipe dry. Follow polish lines.  |
| <b>Stubborn stains and discolouration all finishes.</b>                     | Mild cleaning solutions. Ensure any proprietary cleaners' state compatibility with Stainless steel phosphoric acid cleaners may also be effective.   | Use rag, sponge or fiber brush (soft nylon or natural bristle. An old toothbrush can be useful). Rinse well with clean water and wipe dry. Follow polish lines.                              |
| <b>Lime deposits from hard water.</b>                                       | Solution of one part vinegar to three parts water.   | Soak in solution then brush to loosen. Rinse well with clean water.  |
| <b>Oil or grease marks. All finishes.</b>                                   | Organic solvents (eg. acetone, alcohol, methylated spirits, proprietary "safety solvents"). Baked-on grease can be softened beforehand with ammonia.   | Clean after with soap and water, rinse with clean water and dry. Follow polish lines.  |
| <b>Rust and other corrosion products. Embedded or adhering "free iron".</b> | Very light rust stains can be removed by 10% nitric acid. More significant rust or embedded iron will require pickling. See also previous sections on Passivating and Pickling. Sand or glass-bead blasting is another option. | Wear PPE as appropriate. Afterwards rinse well with clean water. Mix in acid proof container, and be very careful with the acid. (see Precautions for acid cleaners).                        |
| <b>Dark oxide from welding or heat treatment.</b>                           | "Pickling Paste" or pickling solutions given on previous page.   | Must be carefully rinsed and use care in handling (see Precautions for acid cleaners).   |
| <b>Scratches on polished (satin or brushed) finish.</b>                     | Slight scratches – use impregnated nylon pads. Polish with polishing wheel dressed with iron-free abrasives for deeper scratches. Follow polish lines. Then clean with soap or detergent as for routine cleaning.              | Do not use ordinary steel wool - iron particles can become embedded in Stainless steel and cause further surface problems. Stainless steel and "Scotchbrite" scouring pads are satisfactory. |



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