

# WE DELIVER ON OUR PROMISE

## LEADING IN TUNNEL ENGINEERING

Tunnel construction is subject to stringent design requirements, strict safety regulations and hard work in tight spaces. EzyStrut continues to prove their capabilities in these areas, producing world-first systems for several major tunnel projects. Our ISO9001 and ISO14001 certified precision manufacturing, range of 2,500 products, and expertise in international logistics, makes EzyStrut the perfect choice.

AS/NZS3013:2005  
**FIRE RATED**  
CABLE SUPPORT SYSTEMS

**EzyStrut**



**TITAN**  
TECHNOLOGIES



# PROUDLY AUSTRALIAN OWNED



**HEAD OFFICE  
KILBURN  
SOUTH AUSTRALIA**



## WE DELIVER ON OUR PROMISE

Korvest Ltd is an Australian owned, Australian manufacturer based in Kilburn, South Australia. Founded in 1970, Korvest has achieved an enviable reputation within the industry through being able to provide engineered solutions and finish projects on time and within budget.

### 4 SPECIALIST DIVISIONS

Together, EzyStrut, Korvest Galvanisers, Power Step & Titan Technologies produce a range of standard, as well as customised and innovative products.

### ABOUT US

ASX Listed since 1970, Korvest has built itself a strong reputation for being a capable supplier of cable and pipe supports, industrial access and safety systems, fastening solutions, and galvanising services. We are ISO9001, and ISO14001 certified.

All Korvest's business units work together, and can develop an integrated, complete solution quickly and finished to recognised Australian and international standards.

Korvest is efficient, reliable, and flexible. Our workforce is multi-skilled, and lead by a central management team able to adapt to sudden changes in demand and customer needs as they happen.

### HEAD OFFICE

The company's manufacturing plant and head office is based in Kilburn, South Australia. Centrally located under 10km from Adelaide city and Port Adelaide.

### ACROSS AUSTRALIA AND INTERNATIONAL

Nationally, Korvest has offices located in Adelaide, Melbourne, Sydney, Brisbane and Perth, with distributors in Darwin, Townsville, Hobart, as well as New Zealand. National and international transport is achieved easily with Korvest's existing network, or we can provide ex-works availability as required.

### OUR PEOPLE

Korvest's workforce of around 180 employees is multi-skilled, and lead by a central management team. And has the capacity to scale up production should a project require more hands or hours to meet strict deadlines.



## RESOURCE CAPACITY

### DESIGN

EzyStrut continues to invest countless hours in the development and ongoing improvement of our cable and pipe support systems. Using the latest programs in design technology, new products can be prototyped through virtual modelling before commercial fabrication. A complete library of workshop and technical drawings is made available for integration into client construction designs.

### ENGINEERING

Korvest Engineering has extensive experience in designing cable support systems for road and train tunnels. We have provided innovative and bespoke product solutions that meet the customer's specifications and performance requirements while minimising overall installation time and effort. Our experience includes designing cable support systems to 450°C, WS5X classification to AS/NZS3013:2005, and seismic restraint to AS1170.4. We can also work to the customer's design. Korvest Engineering works directly with customer's engineering team in order to ensure design objectives are met economically and efficiently.

### QUALITY

Ezystrut is committed towards quality at all levels within the organisation, and works and complies to requirements of ISO 9001:2015 quality management systems. EzyStrut is ready and able to provide project specific quality control procedures and manuals to suit the most demanding project requirements. Our proven performance has been demonstrated through partnerships formed with many of the largest engineering and construction companies, responsible for building many of the highest profile projects across all sectors of industry.

### MANUFACTURING

EzyStrut manufacture one of the most diverse range of cable and pipe support products in industry, suitable for virtually all applications. Our manufacturing facilities include a broad range of advanced manufacturing equipment capable of producing almost any engineered product efficiently and accurately, as well as one of the largest Hot Dip Galvanising facilities in Australia. Using only prime quality materials and manufactured to recognised standards, EzyStrut can respond to all industry demands. Our flexible approach toward production planning, rotating shift management and a multi skilled workforce has seen us meet the challenges of the largest projects.

## PROJECT MANAGEMENT

To ensure that the project runs on time and the status is continually communicated effectively to all stakeholders, EzyStrut will assign a specific Project Manager to the project. The Project Manager's role will be to ensure that any likely capacity constraints are highlighted early, and increased production capacity strategies are actioned to remain on schedule. EzyStrut will ensure that its supplier base is aware of the importance of delivery on time with continual support and management of our supplier base to perform to schedule. The project manager's role will also be to ensure that quality checks are completed and distribution of that information is communicated effectively, with product distribution continually monitored for conformance to customer requirements.

EzyStrut will develop an execution plan across the entire project, as information is made available on the required delivery schedule by the customer. A manufacturing and distribution schedule will be available to view at any time, measuring EzyStrut's project forecast to actual supply. If the plan's actual supply deviates from the forecast, EzyStrut will develop and make available a recovery plan to ensure that the project is brought back inline with the forecast.

## DISTRIBUTION

Whether it is around the corner, or the other side of the world, EzyStrut can cater to all the logistical needs of your next project. Export packaging, documentation, customs and clearance can be managed under our control. EzyStrut continues to set the industry benchmark for supply and reliability.

## WE DELIVER ON OUR PROMISE

EzyStrut has built an enviable reputation within the industry by delivering projects on time and within budget. These simple words have become the cornerstone to our success, by providing the level of service and reliability needed in today's market.



# PROJECT: WESTCONNEX M8

## PROJECT OVERVIEW

\$4.34bn	2020	up to 37k	102Km	105
Project	expected to be open to traffic.	vehicles per average weekday projected to use this tunnel in 2031*	cable ladder of various sizes supplied.	different customised solutions provided.

\*Based on WestConnex Road Traffic Model V2.1, WestConnex Updated Strategic Business Case, November 2015.

Ezystrut offers design, manufacturing and supply of support structures to various sizes depending on the location in the tunnel and load rating of the instruments attached to the crown of the tunnel.

The WestConnex M8 (previously known as the new M5) is stage 2 of the WestConnex motorway upgrade in Sydney. For this project, our in-house engineering team worked with the contractor's designs to ensure the highest quality, safest and most economical support structures were designed and provided ongoing support throughout the project. Our in-house production and galvanising team ensured products were manufactured as per the schedule.

The Korvest/EzyStrut team manufactured and delivered over 100km of fire rated cable ladder which is designed to support tunnel lighting and communication cabling suspended above head from the tunnel crown. The LV and HV through cabling was mounted behind the architectural panelling on 10,000+ custom 4-tier support brackets that we supplied.

The instruments supported using EzyStrut Support Structures include:

- ISLUS - Integrated Speed Limit and Lane Use Sign
- TMS – Tunnel Message Sign
- CCTV – Incident Protection Cameras
- PA – Public Announcement Speaker system.
- PTZ Camera Brackets.

## WHAT WE SUPPLIED


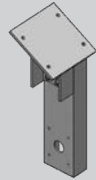
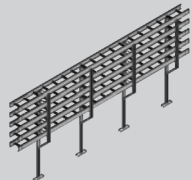

TMS Support Bracket	PTZ Camera Brackets	Side Wall Support	PA Speaker Brackets
			





Photo: Brisbane Airport Link Tunnel  
Source: johnholland.com.au

# PROJECT: BRISBANE AIRPORT LINK TUNNEL

EzyStrut’s engineering team designed a revolutionary new concept for fire-rated cable support systems to handle the cable management for the tunnel.

This was the first cable support system to comply with the AS/NZS3013:2005 standard. Our product passed an independent test where it was subjected to temperatures peaking at 1050°C over a 2 hour period. EzyStrut delivered a special matte black powder coat finish to prevent unwanted light reflections that could affect drivers using the tunnel.



## PROJECT OVERVIEW

\$6.5bn	6.7km	up to 150k	15km	750,000kg
Project	Road Tunnel	vehicles use this tunnel daily.	cable ladder supplied on time.	can be supported by the installation.



## PROJECT: **SYDNEY METRO NORTHWEST**

EzyStrut's engineering was actively involved in design and supply of cable support systems for the tunnel system and the station.

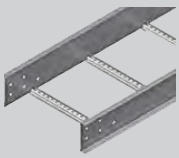
Products supplied:

- Cable Ladder (various sizes) - 12,000m
- MTO Brackets
  - Emergency Lighting System - Fire Rated Cantilever Bracket >17,300
  - Signalling Containment System - Made to Order Cantilever Bracket >7,100
  - Low Voltage Containment System - Made to Order Cantilever Bracket >10,700



## WHAT WE SUPPLIED

Ladders



Bends



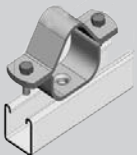
Risers



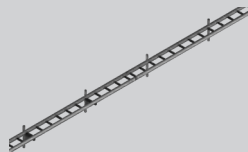
Trapezes



Tri-Foil Clamps



LV Cantilever Bracket



ELS Cantilever Bracket



Photo: Sydney Metro North West  
Source: [cjcmanagement.com.au](http://cjcmanagement.com.au)



# FIRE RATED CABLE SUPPORT SOLUTIONS

## TECHNICAL INFORMATION

### AS/NZS3013:2005

All EzyStrut fire rated cable supports are certified to AS/NZS3013:2005 Appendix C Classification WS5X (2 Hours) with a peak temperature of 1050°C. AS/NZS3013:2015 certification is only achieved by abiding by the installation information contained in this catalogue.

### TESTING

All testing of EzyStrut fire rated cable supports is carried out in accordance with relevant loading, and AS/NZS3013:2005 requirements. All results are independently certified by a NATA accredited facility.



### LOAD OVER SPAN

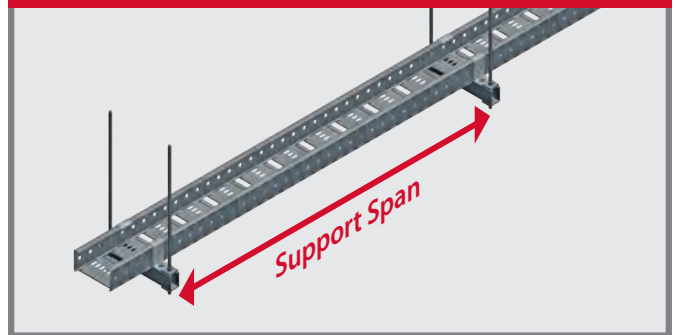
When choosing your cable support system, it is important to consider the weight (**load**) you want to support over a certain **span**. In the case of trapeze mounted cable trays or ladders, the span is the distance between these trapezes, separate from the overall length of the cable support product.

In many cases, the **higher** your desired load, the shorter the maximum allowable spans become, because shorter spans can support more weight. Shorter spans also result in less **deflection**. However, if you require longer spans and less fixing points for your support product, this can be achieved by reducing the maximum load per metre allowable over that span.\*

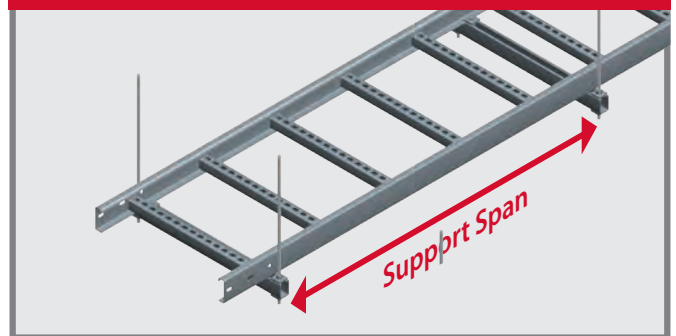
**Support Span** is the distance between trapeze supports on your tray or ladder.

**Overall Length** is the total length of your support product regardless of the quantity of supports.

### FIRE RATED CABLE TRAY



### FIRE RATED CABLE LADDER



### CABLE TRAY VS LADDER

Cable tray offers continuous support of cables along the entire length. Normally it is offered in 3m lengths.

Cable ladder offers greater strength when compared to other cable support products, using welded rungs to support your cables, and is offered in 3 or 6m lengths.

### LONGER SUPPORT SPAN

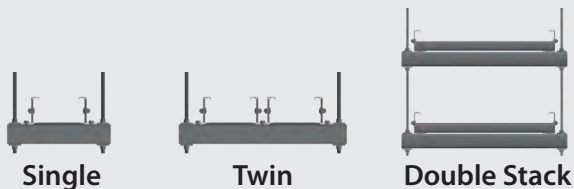


### SHORTER SUPPORT SPAN

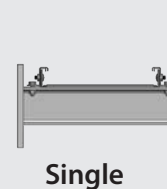


## SUPPORT AND DESIGN PROFILE OPTIONS

### Trapeze Bracket



### Cantilever Bracket



## SUPPORT AND DESIGN PROFILES AVAILABLE

EzyStrut's fire rated cable support range has always utilised trapeze brackets for our tray and ladder. We now have a NEW range of fire rated ET3 cable tray and cantilever assemblies; expanding your choice when it comes to supporting your cables.

Refer to the handy comparison tables on page 12 and 13 to select the best option for your project.

## AVAILABLE ORIENTATIONS

All our fire rated cable tray and ladder can be used in horizontal orientation. However, some of our fire rated cable tray and ladder can also be installed vertically and on-edge configuration (ladder rung perpendicular to ground) with the same spans as horizontal assemblies. Refer to the tables on page 12 and 13 under "Available Orientations".

Please contact EzyStrut for further information and assistance in selecting the right option for you.

## MATERIALS AND FINISHES

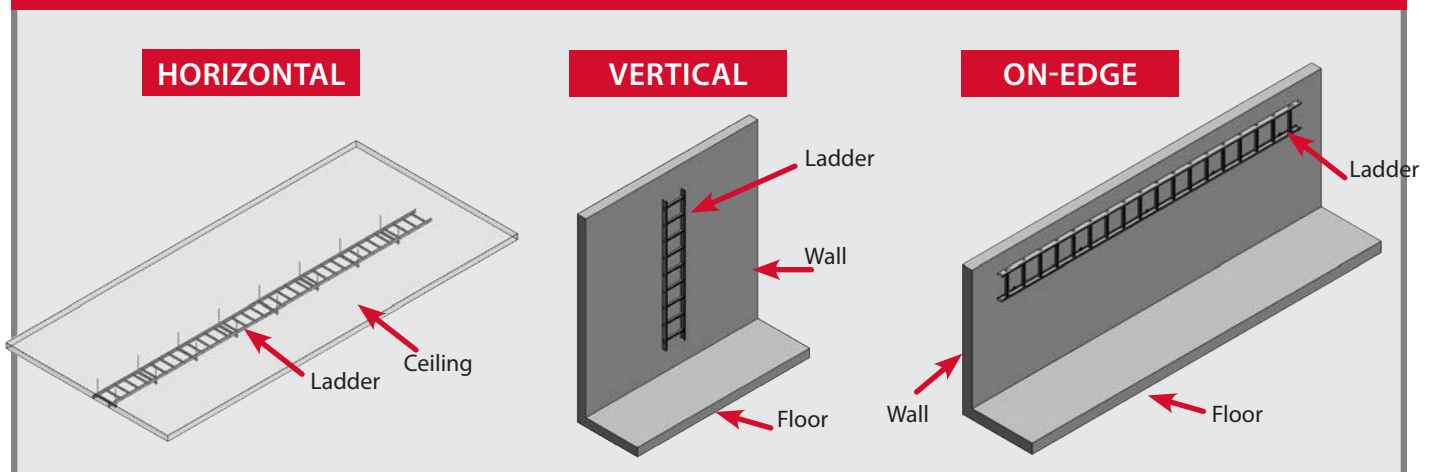
By standard, EzyStrut fire rated components are manufactured from steel, and are hot dip galvanised after fabrication to meet AS4680:2006. This gives them a strong, all over coating of zinc that is metalurgically bonded to the parent steel, and means that the product is protected against corrosion in most outdoor environments.

Tray can also be fabricated from pre-galvanised steel, which has a visually clean appearance, and is ideal for inside installations where the product will be visually exposed.

## HANDY INFO

EzyStrut's fabrication services (EzyFab) can assist with arranging for powder coating of all products, as an optional, additional finish, to provide any colour necessary for design reasons, as well as special matte black to prevent reflections on the steel if the product is being installed in an environment such as a road tunnel.

## AVAILABLE ORIENTATIONS









# FIRE RATED CABLE SUPPORT OPTIONS




## The widest range of AS/NZS3013:2005 compliant Fire Rated Cable Support Solutions.


EzyStrut understands installers' needs for projects requiring AS/NZS3013:2005 conformance. These projects need reliability, effortless installation, options for different loads and spans, and assurance of compliance with the stringent standard.

With over 15 years designing and testing to the AS/NZS3013:2005 standard, EzyStrut has built up a huge suite of off the shelf systems designed to suit a wide range of applications.

Additionally, we have a library full of non-advertised customised solutions tested and certified for those not so standard projects. Our Australian engineering team can work with your site specifications and requirements to design an appropriate solution for your needs.

	<div>FR20</div> <div>Fire Rated</div> <div>20kg/m</div> 	<div>FR26</div> <div>Fire Rated</div> <div>26kg/m</div> 	<div>FR35</div> <div>Fire Rated</div> <div>35kg/m</div> 	<div>FR50</div> <div>Fire Rated</div> <div>50kg/m</div> 
Product Type	Cable Ladder	Cable Ladder	Cable Ladder	Cable Ladder
Support Included	Trapeze	Trapeze	Cantilever	Trapeze
Design Profile	Single	Single	Single	Single
Cable Laying Depth	45mm	83mm	65mm	45mm
Cable Laying Widths	150mm 300mm 450mm 600mm	150mm 300mm 450mm 600mm	150mm 300mm	150mm 300mm 450mm 600mm
Support Span	2000mm	2000m	1500mm	1500mm
Available Orientations	Horizontal	Horizontal	Horizontal Vertical On-edge^	Horizontal Vertical On-edge^

	<div>FR50</div> <div>Fire Rated</div> <div>50kg/m</div> 	<div>FR60</div> <div>Fire Rated</div> <div>60kg/m</div> 	<div>FR70</div> <div>Fire Rated</div> <div>70kg/m</div> 	<div>FR100</div> <div>Fire Rated</div> <div>100kg/m</div> 	<div>FR100D</div> <div>Fire Rated</div> <div>100kg/m</div> 	<div>FR114D</div> <div>Fire Rated</div> <div>114kg/m</div> 	
Product Type	Cable Ladder	Cable Ladder	Cable Ladder	Cable Ladder	Cable Ladder	Cable Ladder	Cable Ladder
Support Included	Cantilever	Trapeze	Trapeze	Trapeze	Trapeze	Trapeze	Trapeze
Design Profile	Single	Single	Single	Single	Double Stack	Double Stack	Double Stack
Cable Laying Depth	65mm	83mm	101mm	101mm	45mm x 2	83mm x 2	83mm x 2
Cable Laying Widths	150mm 300mm	150mm 300mm 450mm 600mm	150mm 300mm 450mm 600mm	150mm 300mm 450mm 600mm	150mm 300mm 450mm 600mm	150mm 300mm 450mm 600mm	150mm 300mm 450mm 600mm
Support Span	1000mm	1500mm	1500mm	1050mm	1500mm	1500mm	1500mm
Available Orientations	Horizontal Vertical On-edge^	Horizontal Vertical On-edge^	Horizontal Vertical On-edge^	Horizontal	Horizontal	Horizontal	Horizontal

	<div>FR12</div> <div>Fire Rated</div> <div>12.5kg/m</div> 	<div>FR20</div> <div>Fire Rated</div> <div>20kg/m</div> 	<div>FR20</div> <div>Fire Rated</div> <div>20kg/m</div> 	<div>FR20</div> <div>Fire Rated</div> <div>20kg/m</div> 	<div>FR25</div> <div>Fire Rated</div> <div>25kg/m</div> 	<div>FR40</div> <div>Fire Rated</div> <div>40kg/m</div> 
Product Type	ET5 Cable Tray	ET3 Cable Tray	ET3 Cable Tray	ET5 Cable Tray	ET5 Cable Tray	ET5 Cable Tray
Support Included	Trapeze	Cantilever	Trapeze	Trapeze	Trapeze	Trapeze
Design Profile	Single	Single	Single	Single	Twin	Twin
Cable Laying Depth	78mm	43mm	43mm	78mm	78mm	78mm
Cable Laying Widths	150mm 300mm	150mm 300mm	150mm 300mm	150mm 300mm	300mm 450mm 600mm	300mm 450mm 600mm
Support Span	1500mm	1000mm	1000mm	1000mm	1500mm	1000mm
Available Orientations	Horizontal Vertical On-edge^	Horizontal	Horizontal	Horizontal Vertical On-edge^	Horizontal	Horizontal

\*Minimum order quantities apply. ^These systems can also be installed vertically and on-edge configuration (ladder rung perpendicular to ground) with the same spans as horizontal assemblies. Please contact EzyStrut for further information.

# FIRE RATED FIXINGS

EzyStrut is committed to ensuring that we provide the best economical solution for your project and offer a wide range of choice when it comes to fire rated solutions; even down to the fixings.

Although our fire rated cable tray and ladder range are WS5X certified to AS/NZS3013:2005 Appendix C, our fixings are compliant with European Technical Approval (ETA). At the time of printing, there is no specific Australian Standard for fixings.

Please ask your EzyStrut representative for technical specifications and read the approvals and reports section carefully for each product, to ensure that it meets your requirements.



Fixings with this symbol are also a seismic solution compliant with European Technical Approval (ETA).

## SNAKE-PRO™



Powers' Snake-Pro is an internally threaded self-tapping anchor.

Box Qty: 50

Size	Part Number
M8	SM8PRO-PWR
M10	SM10PRO-PWR

## SDS PLUS DRILL BIT

(Installation tool)



Box Qty: 1

Size	Part Number
12.7	SB12.7x50-PWR

## SETTING TOOL

(Installation tool)



Box Qty: 1

Size	Part Number
M8	SSTM8-PWR
M10	SSTM10-PWR

## SNAKE-PRO™ BULK BUCKET

Includes 500pcs, 2 x drill bits and 1 x setting tool.

Size	Part Number
M10	SM10KIT-PWR

## THREADED ROD HANGER

(Concrete Screw Adaptor)



Box Qty: 50

Zinc

Size = Internal Thread

Size	Description	Part Number
M8-10	6 x 35mm	MUMMCISI05540603
	6 x 55mm	MUMMCISI05540605

## DROP-IN ANCHOR



Box Qty: 100

Size	Zinc (Clear)	Stainless Steel (316)
M6	24600-PWR	06224-PWR
M8	24602-PWR	06225-PWR
M10	24604-PWR	06226-PWR
M12	24606-PWR	06228-PWR

## MANUAL SETTING TOOL

(Installation tool)



Box Qty: 1

Size	Part Number
M6	06330-PWR
M8	06332-PWR
M10	06334-PWR
M12	06336-PWR

## ETA LIPPED-PRO DROP-IN ANCHOR



Box Qty: 100

Zinc (Clear)

Size	Part Number
M6	06304-PWR
M8	06305-PWR
M10	06306-PWR
M12	06308-PWR

## MANUAL SETTING TOOL

(Installation tool)



Box Qty: 1

Size	Part Number
M6	06330-PWR
M8	06332-PWR
M10	06334-PWR
M12	06336-PWR

## LIPPED DROP-IN ANCHOR BUCKET

Size	Description	Part Number
M10	10x40mm (500pcs), 2 x drill bits, and 1 x setting tool.	LDA1040B
M12	12x50mm (300pcs), 2 x drill bits, and 1 x setting tool.	LDA1050B

## CONCRETE STUD SCREW



Box Qty: 25

Stainless Steel

Installation tools are also available.

Size	Description	Part Number
M12	10x160mm	5929261080

## HANGER MATE™

(Internal threaded Rod Hanger)



Box Qty: 100

Zinc Clear



Installation tools are also available.

Size	Description	Part Number
M10	6x40mm	HM6M1040-PWR
M12	8x50mm	HM8M1250-PWR

## SCREW BOLT BLUE TIP (ETA1)



Box Qty: 20-50 varies depending on screw size.

Stainless Steel (316)

Size = thread size x length (mm)

Size	Part Number
M10x60	27045-PWR
M10x75	27050-PWR
M10x100	27055-PWR
M10x110	27046-PWR
M10x120	27060-PWR
M10x140	27048-PWR
M10x160	27052-PWR
M10x200	27054-PWR
M10x240	27056-PWR
M10x280	27058-PWR
M12x75	27065-PWR
M12x100	27070-PWR
M12x150	27075-PWR
M12x200	27064-PWR

## THROUGH BOLT PTB-ETA1-PRO



Box Qty: 25-100 varies depending on screw size.

Zinc (Clear)

Size = thread size x length (mm)

Size	Part Number
M8x85	69308-PWR
M8x105	69314-PWR
M8x130	69318-PWR
M10x90	69334-PWR
M10x120	69340-PWR
M12x90	69358-PWR
M12x100	69360-PWR
M12x135	69366-PWR
M12x185	69372-PWR

## THROUGH BOLT PTB-SS-ETA1-PRO



Box Qty: 25-200 varies depending on screw size.

Stainless Steel (316)

Size = thread size x length (mm)

Size	Part Number
M8x50*	07802-PWR
M8x65	07804-PWR
M8x75	07806-PWR
M8x85	07807-PWR
M8x95	07808-PWR
M8x105	07810-PWR
M8x120	07812-PWR
M8x130	07814-PWR
M10x60*	07820-PWR
M10x80*	07822-PWR
M10x85	07824-PWR
M10x90	07826-PWR
M10x100	07828-PWR
M10x110	07829-PWR
M10x130	07830-PWR
M10x160	07831-PWR
M10x180	07832-PWR
M12x80*	07834-PWR
M12x100	07836-PWR
M12x125	07838-PWR
M12x135	07840-PWR

\*Are not ETA approved.

**EzyStrut**

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



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



***korvest galvanisers***

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



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

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