KOUNIS GROUP SINCE 1953

ABN 43 008 701 335

Fire Rated Cable Support Systems

AS/NZS 3013:2005

FIRE RATED

AUSTRALIA WIDE AUSTRALIAN MADE

EDITION 3

Company Profile

With over six decades of design, manufacturing and supply **Kounis Metal Industries** Pty Ltd has changed its name to **Kounis Group**. The change of name represents the broadening of our portfolio with greater diversification of products and services across all sectors of the business.

Our core belief and objective is to provide products and services of a quality which exceed customer expectations in respect to quality, performance, safety and price. This is reinforced by the positive growth of our core business whilst expanding into areas of new growth with the design and manufacture of transportable electrical switchrooms.

The Kounis Group Head Office is located in Western Australian and is also the location of its main manufacturing plant. In addition the group has several supporting workshops and warehouses located in Perth. The Kounis Group has a well-established large sales and warehousing facility in Melbourne to service the East Coast of Australia which carries comprehensive stocks of cable supports and standard products.

The Kounis Group is quality assured to ISO 9001 and prides itself on the quality of its products and services, along with its dedicated highly experienced equal opportunity workforce. With large stocks of standard products all of which conform to Australian Standards and an ability to manufacture and provide services in a minimum time frame the Kounis Group is able to offer unparalleled service levels across all areas of business.

Manufacturing and Shipping Worlwide

- Precision and General Sheetmetal Work
- Electrical Switchboards
- Cable Support Systems
- Transportable Switchrooms
- Light to Medium Fabrication
- Rotor Resistance Starters
- Mining Enclosures
- Packaged sub-Stations
- CNC Turret Punching /Laser Cutting and Folding
- De-Watering Skids
- Architectural Screens and Perforating
- Switchboard Service Maintenance and Audits

Managing Director

Dave Kounis

November 2016

E.&O.E.

Health, Safety, Environment and Quality (HSEQ) Policy

The Kounis Group considers Health, Safety, Environment and Quality (HSEQ) an integral part of the company's business vision and values. Our objective is to provide, with the assistance of our people, a workplace that protects the safety and health of its employees, contractors, customers and visitors, whilst producing products and services of an outstanding quality.

The Kounis Group utilises its development and implementation of a documented and systematic HSEQ management system that includes the establishment of HSEQ business standards and supporting procedures, practices, guidance and information. A key aspect of this approach will involve the adoption of risk management for identifying, assessing, controlling and monitoring all areas of the business's operations. In maintaining this commitment, we have developed a Quality Assurance System (QAS) which incorporates all aspects of HSEQ, including objectives, targets and key performance indicators, all of which are utilised to enable continual improvement of operations.

Objective

The Kounis Group will provide products and services of a quality which conform to customer requirements and consistently exceed our customer's needs and expectations. To achieve this, we have implemented a Quality Management System which conforms to ISO 9001. The Kounis Group aims to strive towards continuous improvement in products and services for our customers by providing the appropriate training, resources (both internal and external), equipment, training, support and reference materials to ensure its HSEQ objectives are met.

Management Responsibilities

The Managing Director is ultimately responsible for HSEQ management and compliance throughout the company. All managers, supervisors and leading hands are responsible for work areas under their control. HSEQ procedures are in place and observed, and for communicating and implementing the necessary information and guidance to achieve the company's objectives. Managers, supervisors and leading hands are expected to continuously promote and maintain a high standard of quality and safety in their respective work areas and to lead by example and encourage involvement of employees.

Employee Responsibilities

Employees are responsible for actively participating in the HSEQ management system requirements. This includes working in a safe and healthy manner, participating in training, complying with company procedures, instructions and directions. And not adversely affecting the safety of fellow employees, contractors, customers and visitors, reporting of hazards or incidents, and ensuring the quality of both product and service.

Communication

The Kounis Group, through our consultative process, encourage two-way communication, cooperation and involvement of management, employees, contractors and customers in the ongoing development of our HSEQ management system (QAS).

Managing Director

Dave Kounis

November 2016

E.&O.E.

AS/NZS 3013:2005 Fire Rated Cable Support Systems

The Kounis Group is pleased to offer one of the most comprehensive ranges of Fire Rated Cable Support Systems in Australia and New Zealand. The range of products has been developed in house by our dedicated team of designers and engineers using cutting edge 3-D modelling and technology and fully complies with **AS/NZS 3013:2005, Appendix C, Classification WS5X – 2 hour fire rating up to 1050 Degrees Celsius.** The range is driven by innovation and ingenuity typical of all the Kounis Group products across our entire Cable Supports range. Whilst understanding the requirements of **AS/NZS 3013:2005** and the strict compliance that is required to achieve the standard we have developed a comprehensive range of products that offer ultimate flexibility in choice, design, loading and installation; saving both time and money.

The following technical information contained on this page is designed to assist in the selection process and to simplify what to some is a difficult task of selecting the correct product for its intended application whilst maintaining compliance with the standard.

Selection Considerations for Cable Support Systems

When considering a solution for the selection and installation of Fire Rated products it is important to consider,

- Application
- Load Rating (Cable Weight based on kg/m) and Span
- Available installation room
- Finish

The Kounis Group Fire Rated Cable Supports have load ratings starting from 10 kg/m for lighter applications through to 120 kg/m for heavy duty applications and are available in Cable Tray and Cable ladder configurations. Multiple widths, Spans and support combinations are offered with the largest cable laying depth available on the market.

The Kounis Group Cable Supports are available in a variety of finishes including Galvabond suitable for indoor uses such as concealed and exposed ceiling spaces, and Hot Dip Galvanized for harsher outdoor environments. We also offer in house Powder coating in your choice of colour for split services identification and for non-reflective environments such as tunnels where products need to blend into their environment.

The Kounis Group range of Fire Rated Products is designed to be used as a total system in accordance with the specification, ratings and support options. Failure to adhere to these design and installation parameters may result in non-compliance to AS/NZS 3013:2005. Please speak to one of our representatives for further advice.

E.&O.E.

Fire Rated Cable Support Systems

AS/NZS 3013:2005

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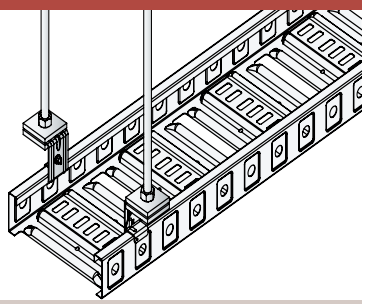
Light Duty Cable Tray



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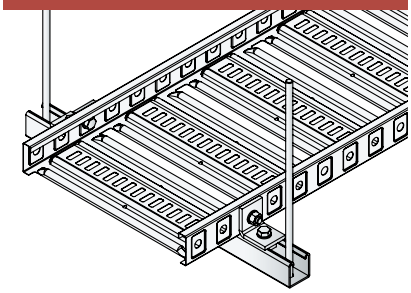
Medium Duty Cable Tray



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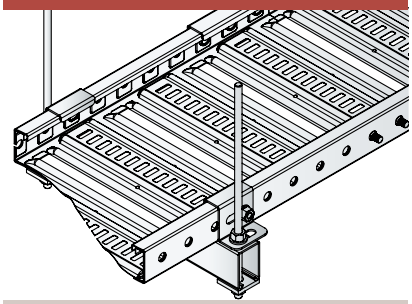
Heavy Duty Cable Tray



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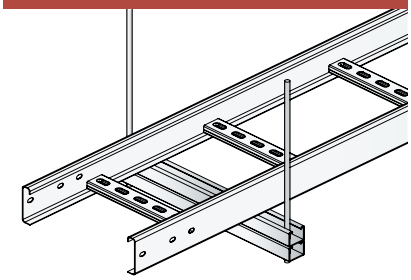
Medium-Heavy Duty Cable Ladder



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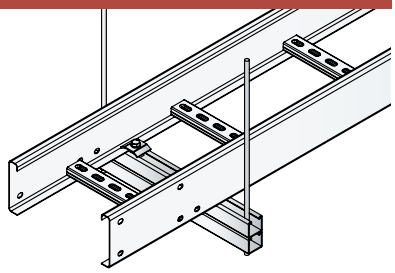
Heavy Duty Cable Ladder



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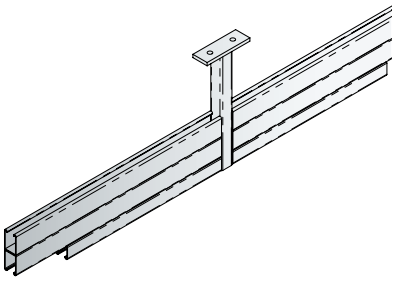
Cantilever Support Brackets



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E.&O.E.

Fire Rated Light Duty Ladder Tray System – AS/NZS 3013:2005

General Description

The Kounis Group Fire Rated Light Duty Ladder Tray System has been designed as an economical solution for light fire rated installations where small cables need to be run and fully complies with **Standards Australia AS/NZS 3013:2005, Appendix C, Classification WS5X — 2 hour fire rating up to 1050 Degrees Celsius**.

The Kounis Group Fire Rated Ladder Light Duty Tray can be installed in tight ceiling spaces where other products on the market will simply not fit. The system offers the advantage of fire rated runs at 1.65 m spans and can simply continue into non fire rated areas with normal commercial spans without the need for special adaptors or other products saving time and money.

The finished product has three options. Galvabond for indoor use, Hot Dip Galvanised for outdoor and corrosive environments and Powder Coated finish in a choice of colours.

Tray options are KT3 which offers a 50 mm high sided tray with a usable depth of 45 mm and KT5 which offers a 85 mm high sided tray with a usable depth of 80 mm.

Both of which include the following features:

- 3 m Lengths
- Laying width of 150 mm
- Load Rating of 10 kg/m on a 1.65 m span
- Unique hanger system design used in conjunction with economical 10 mm standard tensile threaded rod reducing the need for Trapeze Supports saving time and money.

Must be used as a complete system to achieve Fire Rating.

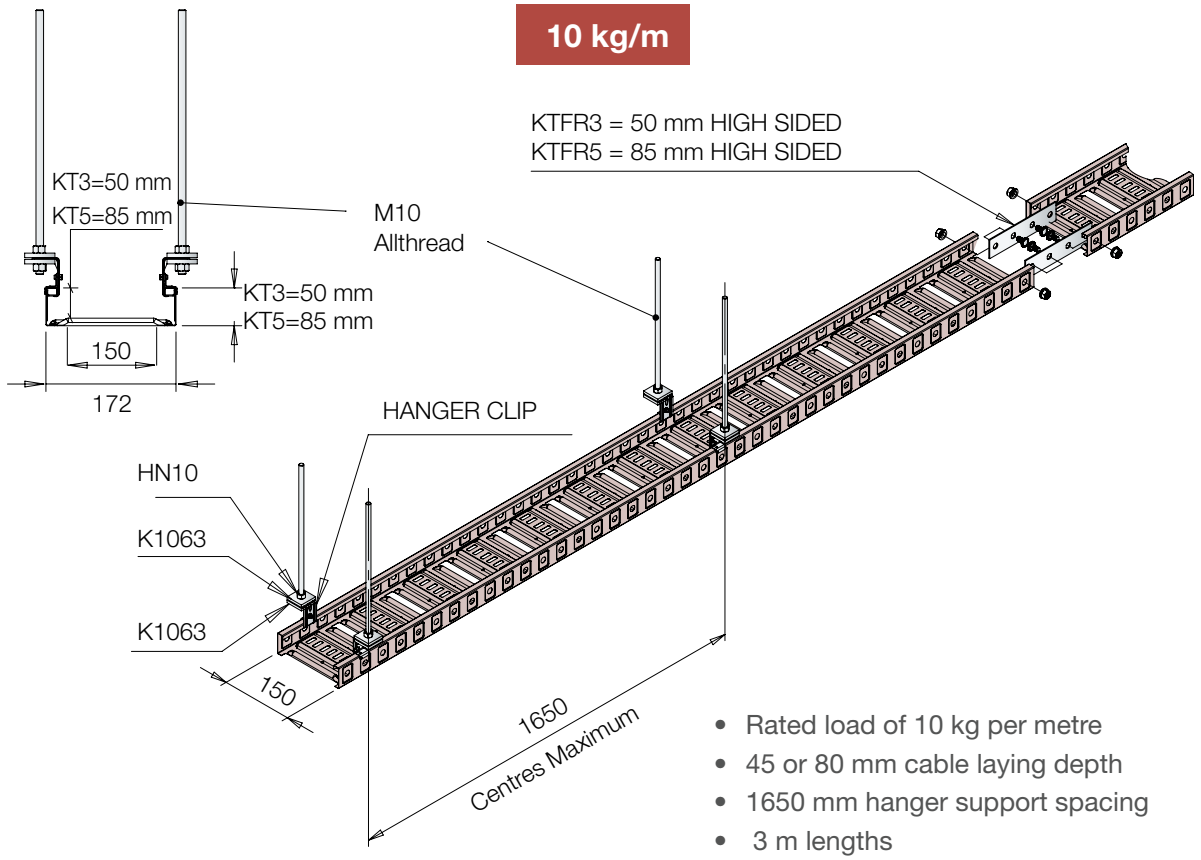
Ends of runs must be supported.

Contact a Kounis Group representative for further information.

Fire Rated Light Duty Ladder Tray System – AS/NZS 3013:2005

Fire Rated Light Duty Ladder Tray

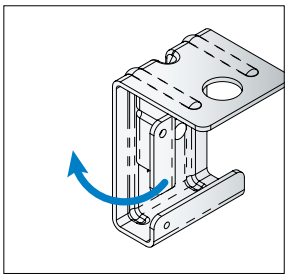
10 kg/m



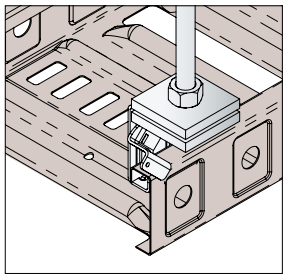
- Rated load of 10 kg per metre
- 45 or 80 mm cable laying depth
- 1650 mm hanger support spacing
- 3 m lengths

LADDER TRAY SIZE
150 mm

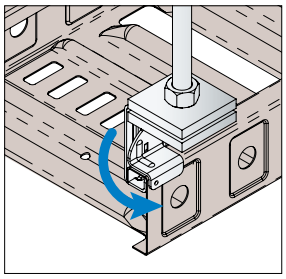
Ladder Tray Hanger Clips*



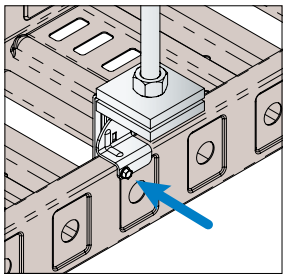
1. Rotate the retaining tab into the open (horizontal) position.



2. Hook on the ladder tray.



3. Rotate the tab back into the closed (vertical) position.



4. Insert and tighten the locking screw.

When Ordering

Range	Type	Size	Finish
KTFRL = Ladder Tray	**3**	**15**	**G**
Fire Rated Light	3 = 50 mm High Sided 10 kg/m 5 = 85 mm High Sided 10 kg/m	15 = 150 mm SP = Splice Plate H= Hanger	G = Galvabond H = Hot Dip Galv P = Painted

- Ordering Example shown is The Kounis Group Ladder Tray Light, Type 3, 50 mm High Sided, 10 kg/m, 150 mm Wide, Galvabond Finish.
- Splice Plate Kit includes Fasteners.
- Hanger Kit includes, 2 x Hanger Clips, 4 x K1063 Flat Plates, 4 x M10 Hex Nuts, 2 x Tek Screws.
- M10 Threaded Rod ordered seperatly.

E.&O.E.

Fire Rated Medium Duty Ladder Tray System – AS/NZS 3013:2005

General Description

The Kounis Group Fire Rated Medium Duty Ladder Tray System has been designed as an economical solution for Medium fire rated installations where medium cables need to be run and fully complies with **Standards Australia AS/NZS 3013:2005, Appendix C, Classification WS5X — 2 hour fire rating up to 1050 Degrees Celsius**.

The Kounis Group Fire Rated Medium Duty Ladder Tray can be installed in tight ceiling spaces where other products on the market will simply not fit. The system offers the advantage of fire rated runs at 1.5 m spans and can simply continue into non fire rated areas with normal commercial spans without the need for special adaptors or other products saving time and money.

The finished product has three options. Galvabond for indoor use, Hot Dip Galvanised for outdoor and corrosive environments and Powder Coated finish in a choice of colours.

Tray options are KT3 which offers a 50 mm high sided tray with a usable depth of 45 mm and KT5 which offers a 85 mm high sided tray with a usable depth of 80 mm.

Both of which include the following features:

- 3 m Lengths
- Laying width of 150 mm and 300 mm
- Load Rating of 25 kg/m on a 1.50 m span
- Traditional Trapeze support used in conjunction with economical 10 mm standard tensile threaded rod.

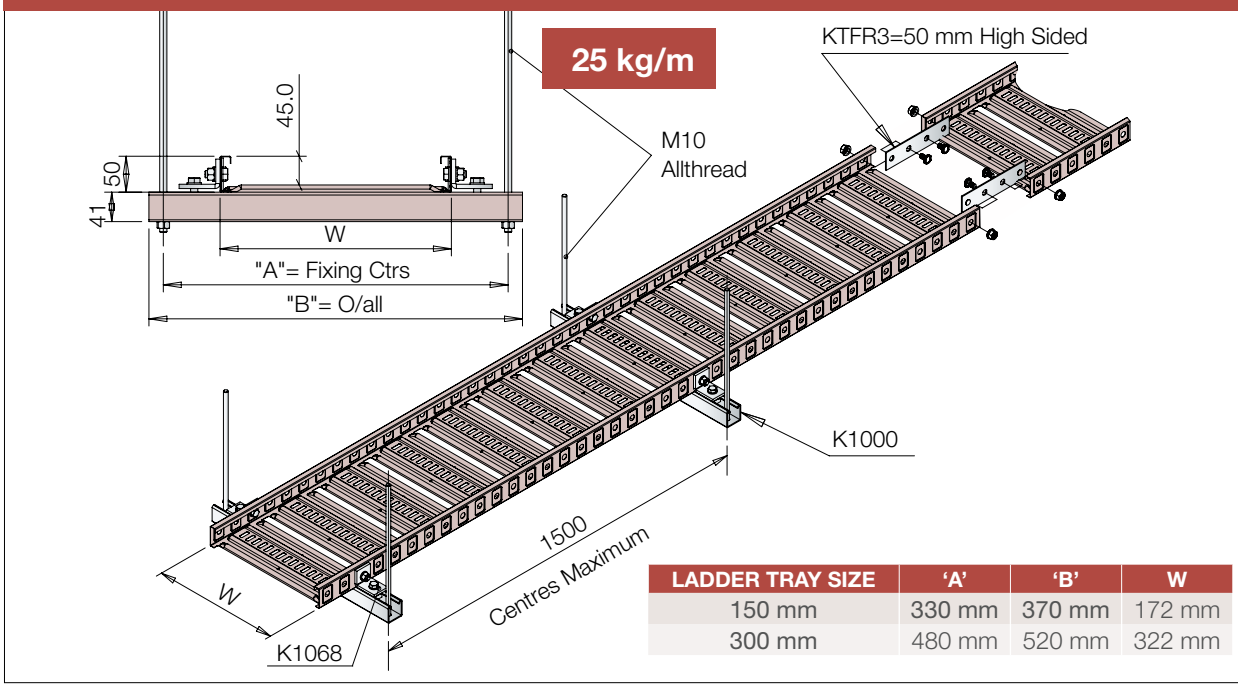
Must be used as a complete system to achieve Fire Rating.

Ends of runs must be supported.

Contact a Kounis Group Group representative for further information.

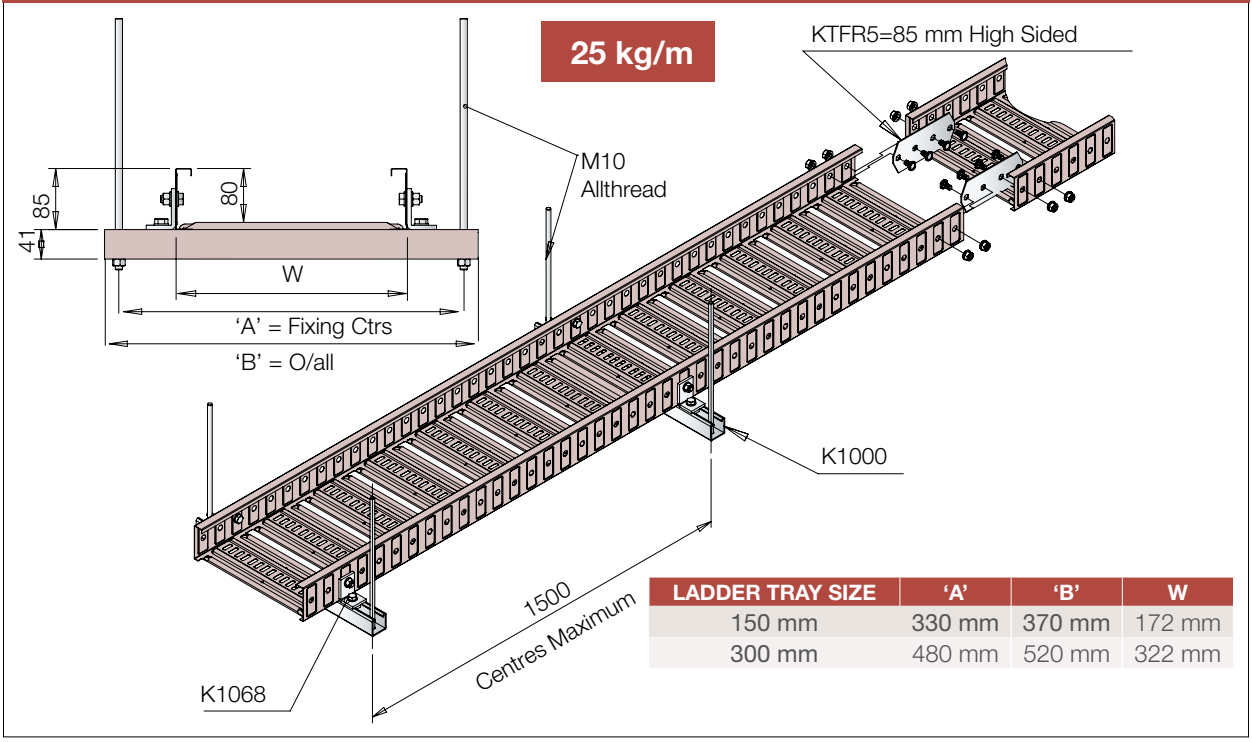
Fire Rated Medium Duty Ladder Tray System – AS/NZS 3013:2005

Fire Rated Medium Duty Ladder Tray KT3



LADDER TRAY SIZE	'A'	'B'	W
150 mm	330 mm	370 mm	172 mm
300 mm	480 mm	520 mm	322 mm

Fire Rated Medium Duty Ladder Tray KT5



LADDER TRAY SIZE	'A'	'B'	W
150 mm	330 mm	370 mm	172 mm
300 mm	480 mm	520 mm	322 mm

When Ordering

Range	Type	Size	Finish
KTFRM	**3**	**15**	**G**
KTFRM = Ladder Tray Fire Rated Medium	3 = 50 mm High Sided 25 kg/m 5 = 85 mm High Sided 25 kg/m	15 = 150 mm 30 = 300 mm SP = Splice Plate T15 = 150 w Trapeze T30 = 300 w Trapeze	G = Galvabond H = Hot Dip Galv P = Painted

- Ordering Example shown is Kounis Ladder Tray Medium, Type 3, 50 mm High Sided, 25 kg/m, 150 mm Wide, Galvabond Finish.
- Splice Plate Kit includes Fasteners.
- Trapeze Kit includes, 1 x Trapeze Strut to size, 2 x K1068 angle Brackets , 2 x M10 Spring Nuts, 2 x M10x20 mm Long Set Screws, 2 x M10 Flat Washers, 2 x Ladder Tray Bolts and Nuts.
- M10 Threaded Rod ordered seperatly

E.&O.E.

Fire Rated Heavy Duty Ladder Tray System – AS/NZS 3013:2005

General Description

The Kounis Group' Fire Rated and **Patented** Heavy Duty Ladder Tray Systems are the most cost effective and versatile systems on the market today. Invented and developed after extensive in house testing the Systems offer a superior 25-50% higher load rating compared to other Fire Rated products on the market today and fully comply with **Standards Australia AS/NZS 3013:2005, Appendix C, Classification WS5X — 2 hour fire rating up to 1 050 Degrees Celsius.**

The foundation of the Fire Rated Heavy Duty Systems is the standard Kounis Group Ladder Tray coupled with specially engineered and designed side rail mounted Stringers which are fastened to the Tray to provide extra strength and decrease Longitudinal Deflection.

The systems offers the advantage of normal installation for continuous non-fire rated runs and can be retro fitted with the **Patented** Support System where Fire Rating is required. This reduces the requirement for special, expensive, single purpose products that are not transferable to the next installation where Fire Rated support systems may not be specified.

The Kounis Group Fire Rated Ladder Tray can be installed in tight ceiling spaces where other products on the market will simply not fit.

The finished product has three options. Galvabond for indoor use, Hot Dip Galvanised for outdoor and corrosive environments and Powder Coated finish in a choice of colours.

System Options are,

KT3 Fire Rated Heavy Duty Ladder Tray

- 3 m Length
- Laying width of 150 mm, 300 mm, 450 mm and 600 mm
- Load Rating of 50 kg/m on a 1.0 m Span
- Trapeze supports used in conjunction with Fire rated accessories and 12 mm standard threaded rod

KT5 Fire Rated Heavy Duty Ladder Tray

- 3 m Length
- Laying width of 150 mm, 300 mm, 450 mm and 600 mm
- Load Rating of 75 kg/m on a 1.0 m Span
- Trapeze supports used in conjunction with Fire rated accessories and 12 mm standard tensile threaded rod

Must be used as a complete system to achieve Fire Rating.

Ends of runs must be supported.

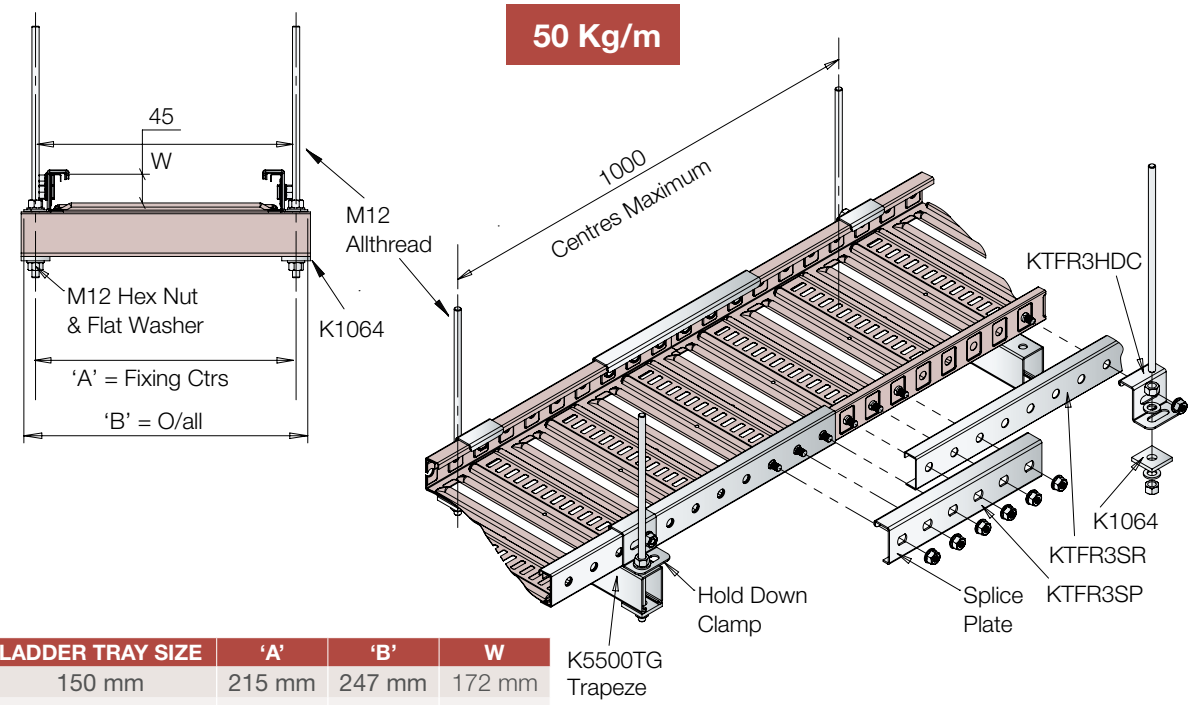
Contact a Kounis Group representative for further information.

E.&O.E.

Fire Rated Heavy Duty Ladder Tray System – AS/NZS 3013:2005

Fire Rated Heavy Duty Ladder Tray KT3

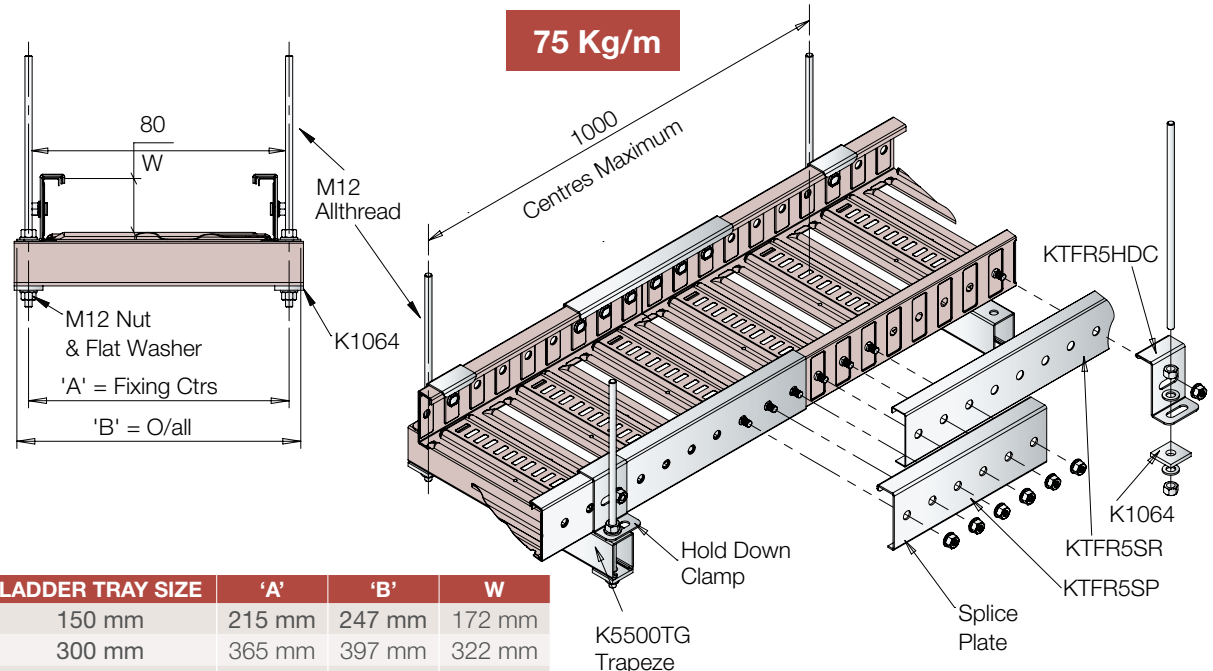
50 Kg/m



LADDER TRAY SIZE	'A'	'B'	W
150 mm	215 mm	247 mm	172 mm
300 mm	365 mm	397 mm	322 mm
450 mm	515 mm	547 mm	472 mm
600 mm	665 mm	697 mm	622 mm

Fire Rated Heavy Duty Ladder Tray KT5

75 Kg/m

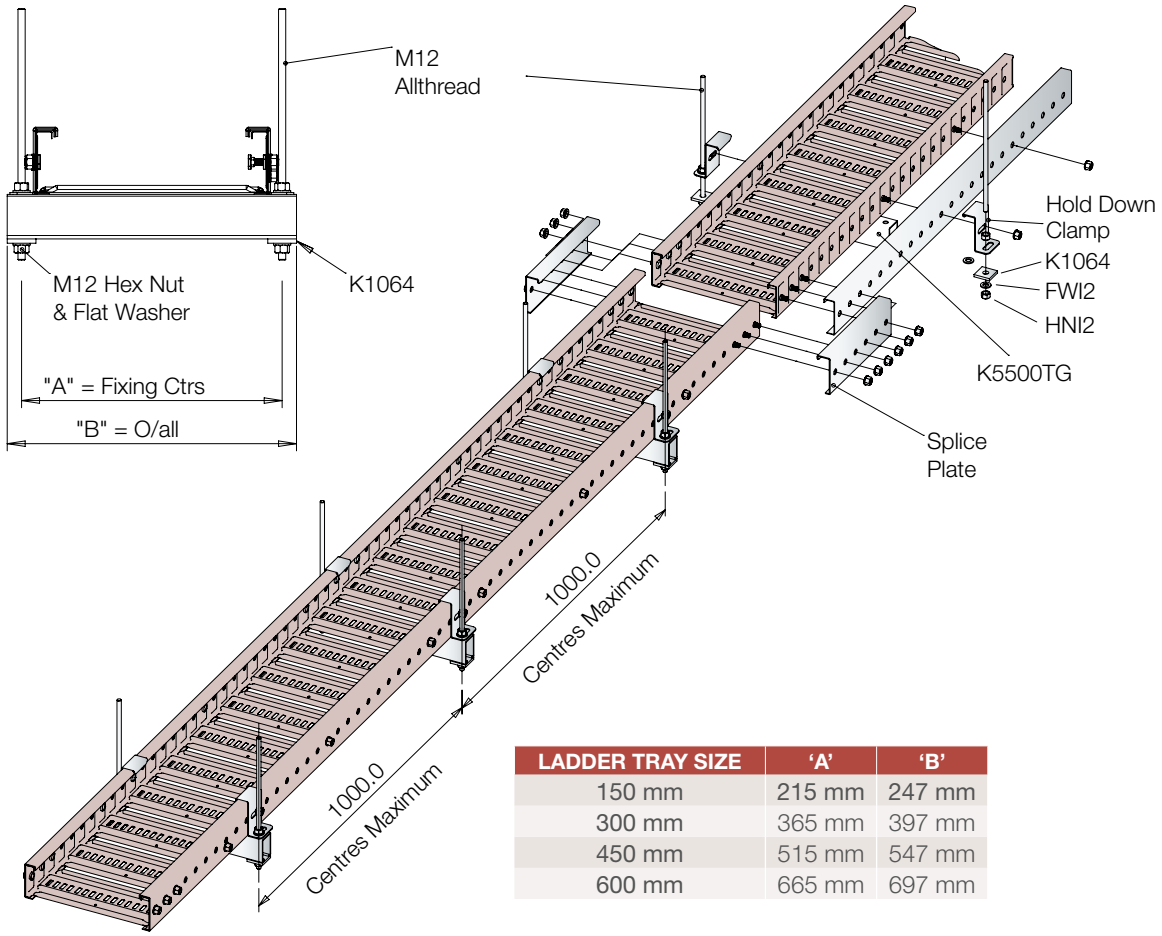


LADDER TRAY SIZE	'A'	'B'	W
150 mm	215 mm	247 mm	172 mm
300 mm	365 mm	397 mm	322 mm
450 mm	515 mm	547 mm	472 mm
600 mm	665 mm	697 mm	622 mm

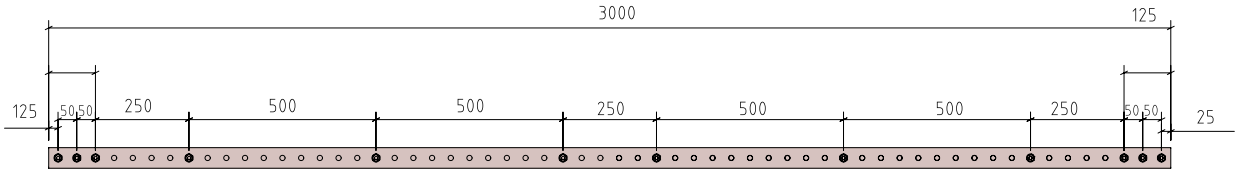
E.&O.E.

Fire Rated Heavy Duty Ladder Tray System – AS/NZS 3013:2005

Fire Rated Heavy Duty Ladder Tray KT3 Assembly Details



LADDER TRAY SIZE	'A'	'B'
150 mm	215 mm	247 mm
300 mm	365 mm	397 mm
450 mm	515 mm	547 mm
600 mm	665 mm	697 mm



Minimum fastening requirements for **SIDE RAIL MOUNTED STRINGERS**

When Ordering

Range	Type	Size	Finish
KTFRH	**3**	**15**	**G**
KTFRH = Ladder Tray Fire Rated Heavy	3 = 50 mm High Sided 50 kg/m 5 = 85 mm High Sided 75 kg/m	15 = 150 mm 30 = 300 mm 45 = 450 mm 60 = 600 mm SP = Splice Plate T15 = 150w Trapeze T30 = 300w Trapeze T45 = 450w Trapeze T60 = 600w Trapeze	G = Galvabond H = Hot Dip Galv P = Painted

- Ordering Example shown is Kounis Ladder Tray Heavy, Type 3, 50 mm High Sided, 50 kg/m, 150 mm Wide, Galvabond Finish. Side Rail Mounted Stringer and Minimum required fastenings are included with Ladder Tray Heavy.
- Splice Plate Kit includes Fasteners.
- Trapeze Kit includes, 1 x Trapeze Strut to size, 2 x Hold down Clamps, 2 x K1064 Flat Plates, 4 x M12 Hex Nuts, 4 x M12 Flat Washers, 2 x Ladder Tray Bolts and Nuts.
- M12 Threaded Rod ordered seperatly

E.&O.E.

Notes

Fire Rated Medium To Heavy Duty Cable Ladder System

– AS/NZS 3013:2005

General Description

The Kounis Group Fire Rated Cable Ladder Systems have been designed after extensive testing and fully comply with Standards Australia **AS/NZS 3013:2005, Appendix C, Classification WS5X — 2 hour fire rating up to 1 050 Degrees Celsius.**

The systems have a maximum load rating of up to 60 kg/m which can be doubled to 120 kg/m with a twin Ladder installation configuration making it the highest load rating of any system on the market today. Cable laying widths of 150 mm, 300 mm, 450 mm and 600 mm are offered with a choice of 75 mm, and 105 mm laying depths in either Hot Dipped Galvanized or Powdercoated finishes. This also means the Kounis Group systems have the deepest laying depth available on the market.

The System offers the advantage of normal installation for continuous non-fire rated runs using the standard Kounis Group Cable Ladder systems as the Splice Plates will connect both kinds of Ladder seamlessly. This reduces the requirement for special, expensive, single purpose products that are not transferable to the next installation where Fire Rated support systems may not be specified.

System options are -

Type 3/50 Cable Ladder System (Based on NEMA 16A)

- 3 m or 6 m length
- 100 mm high Side Rail
- Uniform standard load rating up to 50 kg per metre
- Support span 1.5 metres

Type 4/70/L Cable Ladder System (Based on NEMA 20B)

- 3 m or 6 m length
- 130 mm high Side Rail
- Uniform standard load rating up to 50 Kg per metre
- Support span 1.5 metres

Type 5/112 Cable Ladder System (Based on NEMA 20C)

- 3 m or 6 m length
- 146 mm high Side Rail
- Uniform standard load rating up to 60 kg per metre
- Support span 1.5 metres

The systems have Fire Rated Splice Plates and Trapeze Supports used in conjunction with the more economical 10mm Standard Tensile Threaded Rod if preferred.

Must be used as a complete system to achieve Fire Rating.

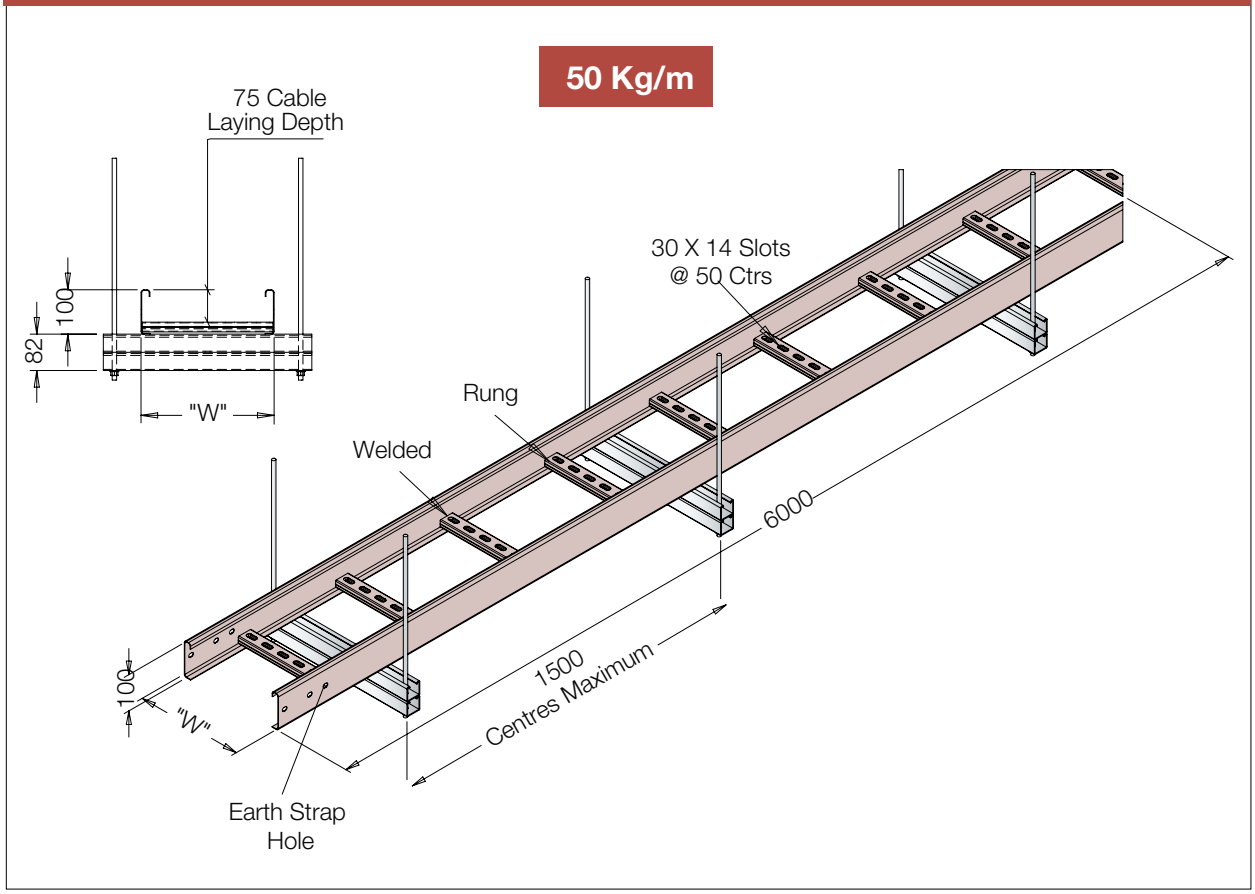
Ends of runs must be supported.

Contact a Kounis Group representative for further information.

E.&O.E.

Fire Rated Cable Ladder Medium To Heavy Duty Type 3/50 – AS/NZS 3013:2005

Fire Rated Cable Ladder Type 3/50



Specification

Class Designation:	Cable ladder-medium to heavy duty type 3/50 AS/NZS 3013:2005.
Material:	Steel sheet.
Finish:	Hot dipped galvanised after fabrication to AS/NZS 4680 i.e. 390 gm/m² zinc, approx, 55µm.
Rung Spacing:	300 mm spacings with slotted rungs standard.
Inside Depth:	75 mm cable laying depth.
Stock Length:	6000 mm standard and 3000 mm joining together by full strength splice plates.
Stock Widths:	150 mm, 300 mm, 450 mm & 600 mm standard.

When Ordering

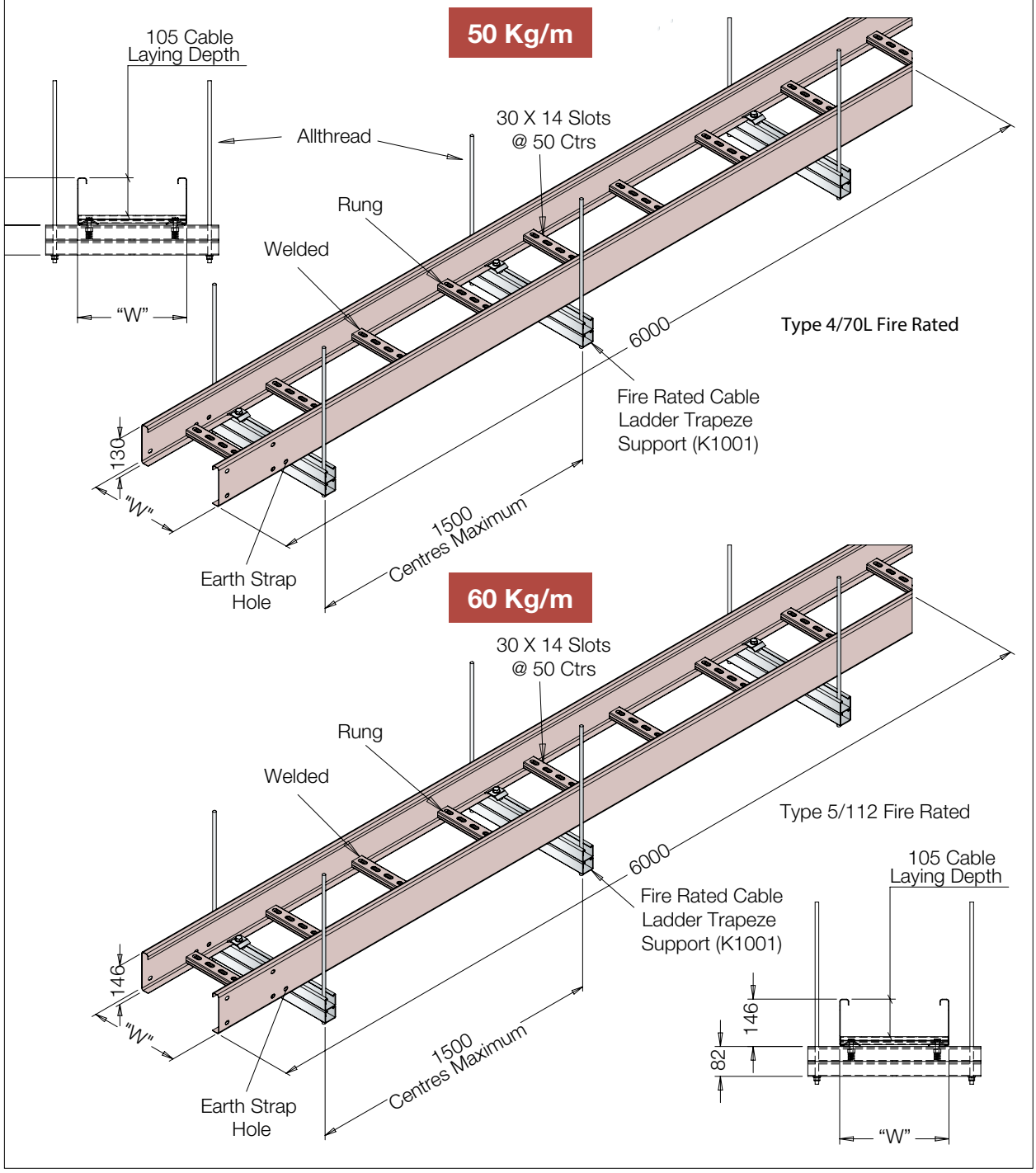
Range	Type	Size	Finish
KCLFR = Cable Ladder	**3**	**15**	**H**
KCLFR= Cable Ladder Fire Rated	3 = 3/50 100 mm High 50kg/m 4 = 4/70/L 130 mm High 50 kg/m 5 = 5/112 146 mm High 60 kg/m	15 = 150 mm 30 = 300 mm 45 = 450 mm 60 = 600 mm SP = Splice Plate T15 = 150w Trapeze T30 = 300w Trapeze T45 = 450w Trapeze T60 = 600w Trapeze	H = Hot Dip Galv P = Painted

- Ordering Example shown is Kounis Cable Ladder, Type 3/50, 100mm High Sided, 50kg/m, 150mm Wide, Hot Dip Galv Finish.
- Splice Plate Kit includes Fasteners.
- Trapeze Kit includes, 1 x Trapeze Strut to size, 2 x Hold Down Clamps, 2 x M10 Spring Nuts, 2 x M10x30mm Long Set Screws, 2 x M10 Hex Nuts and 2 x M10 Flat washers.
- M10 Threaded Rod ordered seperatly

E.&O.E.

Fire Rated Cable Ladder Heavy Duty Type 4/70L & 5/112 – AS/NZS 3013:2005

Fire Rated Cable Ladder Type 4/70L & 5/112



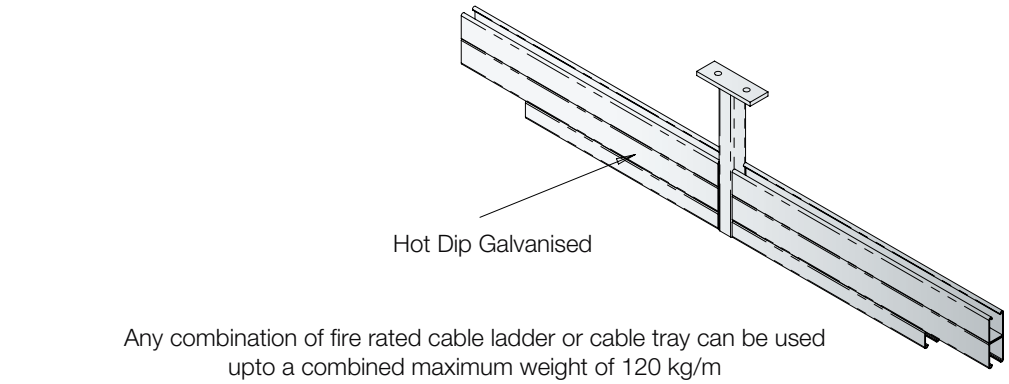
Specification

Class Designation:	Cable ladder-heavy duty type 4/70L & 5/122 AS/NZS 3013:2005.
Material:	Steel sheet.
Finish:	Hot dipped galvanised after fabrication. AS/NZS 4680 i.e. 390 gm/m² zinc, approx, 55 µm.
Rung Spacing:	300 mm spacings with slotted rungs standard.
Inside Depth:	105 mm cable laying depth.
Stock Length:	6000 mm standard & 3000 mm joining together by full strength splice plates.
Stock Widths:	150 mm, 300 mm, 450 mm & 600 mm standard.

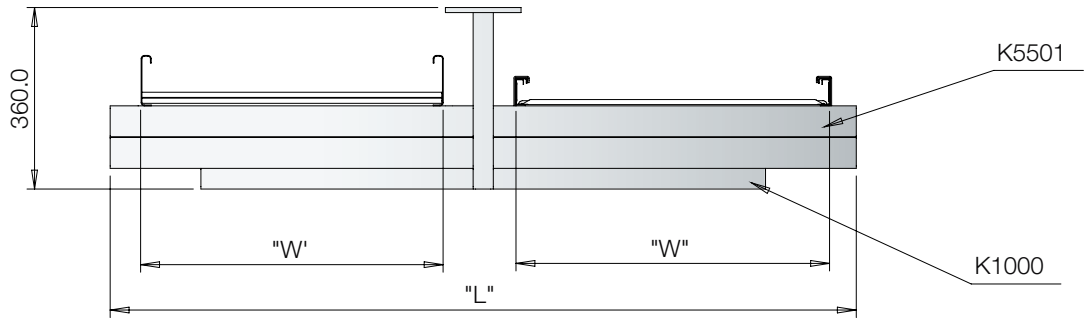
E.&O.E.

Fire Rated Centre Mount Cantilever Support – AS/NZS 3013:2005

Fire Rated Centre Mount Cantilever Support



Any combination of fire rated cable ladder or cable tray can be used upto a combined maximum weight of 120 kg/m



"W " = maximum weight 60 kg

LADDER TRAY WIDTH	'L'	"W" x "W"	Code
150 mm	580 mm	150 mm x 150 mm	KFRCMS580
300 mm	880 mm	300 mm x 300 mm	KFRCMS880
450 mm	1180 mm	450 mm x 450 mm	KFRCMS1180
600 mm	1480 mm	600 mm x 600 mm	KFRCMS1480

E.&O.E.

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