



Technical Channel Support

Metal Framing



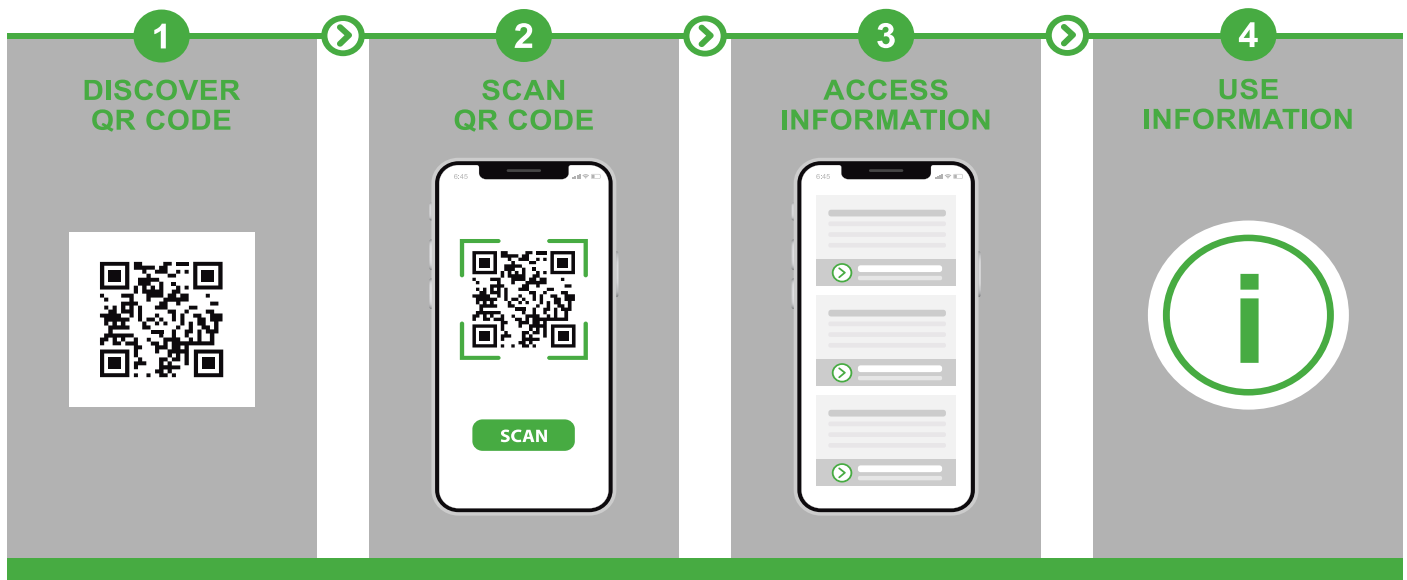
Atkore™
Unistrut

Atkore™
Marco

Building Better Together.



QR Guide



Atkore Unistrut & Marco

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Introduction

Atkore Unistrut's next step

At Atkore Unistrut, we are taking the next step with the introduction of our industry leading fixing and compliance guide in support of contractors. This will provide a guide to support services, combined with the relevant data to work out the service loads, and a guide on best practice with some handy tips.

Many contractors and on-site engineers are well equipped, but some fail to consider the actual loads that are applied through the support services. This can lead to incorrectly specified support and ultimately cause serious failings within the structure.

Making a positive Impact

Atkore Unistrut is leading the way to ensure that we are providing our customers and end users with all the relevant and accurate data to allow contractors the ability to make informed choices and decisions, that will in turn allow them to work effectively. This guide gives the user the necessary training required to build a robust system that will guarantee load performance, coupled with Atkore Unistrut's best practice guide, resulting in our market leading 10-year warranty on Pre-Galvanised product.

The solution

The solution is quite simple, Atkore Unistrut want contractors and on-site engineers to be well equipped by having all the information in hand. The entire catalogue is represented, designed to be easy to use, with high quality visuals all organised into sections, where the user can quickly and easily source and order the right product for their application. This includes having the technical submissions via a QR Code with specific product calculations.



Four Core Principles

Support Considerations



Guide to Load Support

Step by step guide

01

Width requirement
of span/access for
services

02

MEP services
requirements against
specification

03

Check load of MEP
services

04

Define load type for
support and select
appropriate channel
against width

05

Check support
service spans to
meet BS standards
or manufacturer
recommendation

06

Multiply load by span
distance to give you
service weights per
support

07

Factor in self product
weights

08

Configure load
of application to
channel selectors

09

Download QR
code for technical
calculation and
supporting product
data sheets

Unistrut3D Calculation Tool

Calculation Tool

The Atkore Unistrut Calculation Tool allows for design calculations aiding bracket design to support technical submissions.

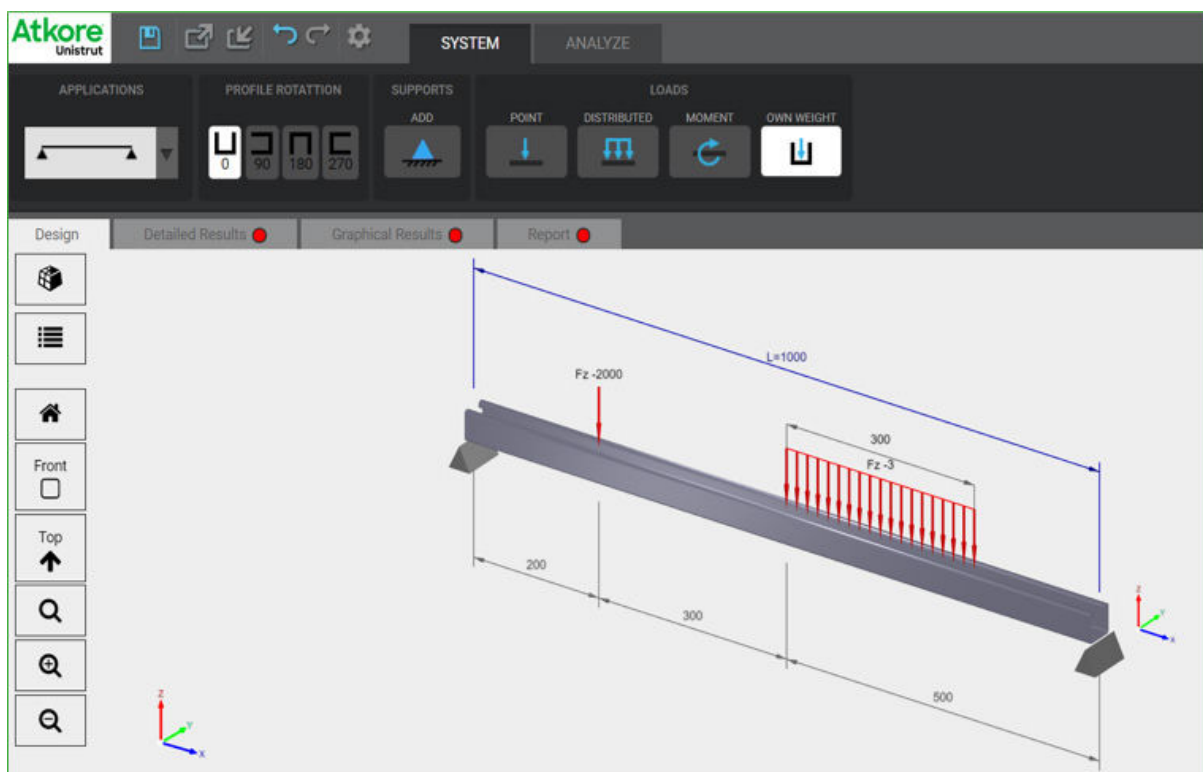
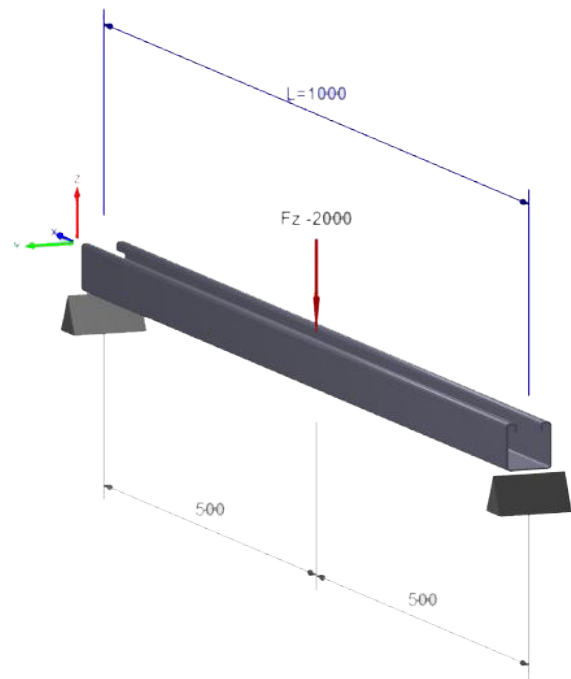
The tool analyses the performance of beams or cantilever brackets when a load is applied.

The calculation tool can calculate point, distributed, moment and omni directional loads to either euro code or other design characteristics.

A long form report, heat map and graphical reports can be produced and exported providing instant results.



Scan the QR code to access the Calculation Tool



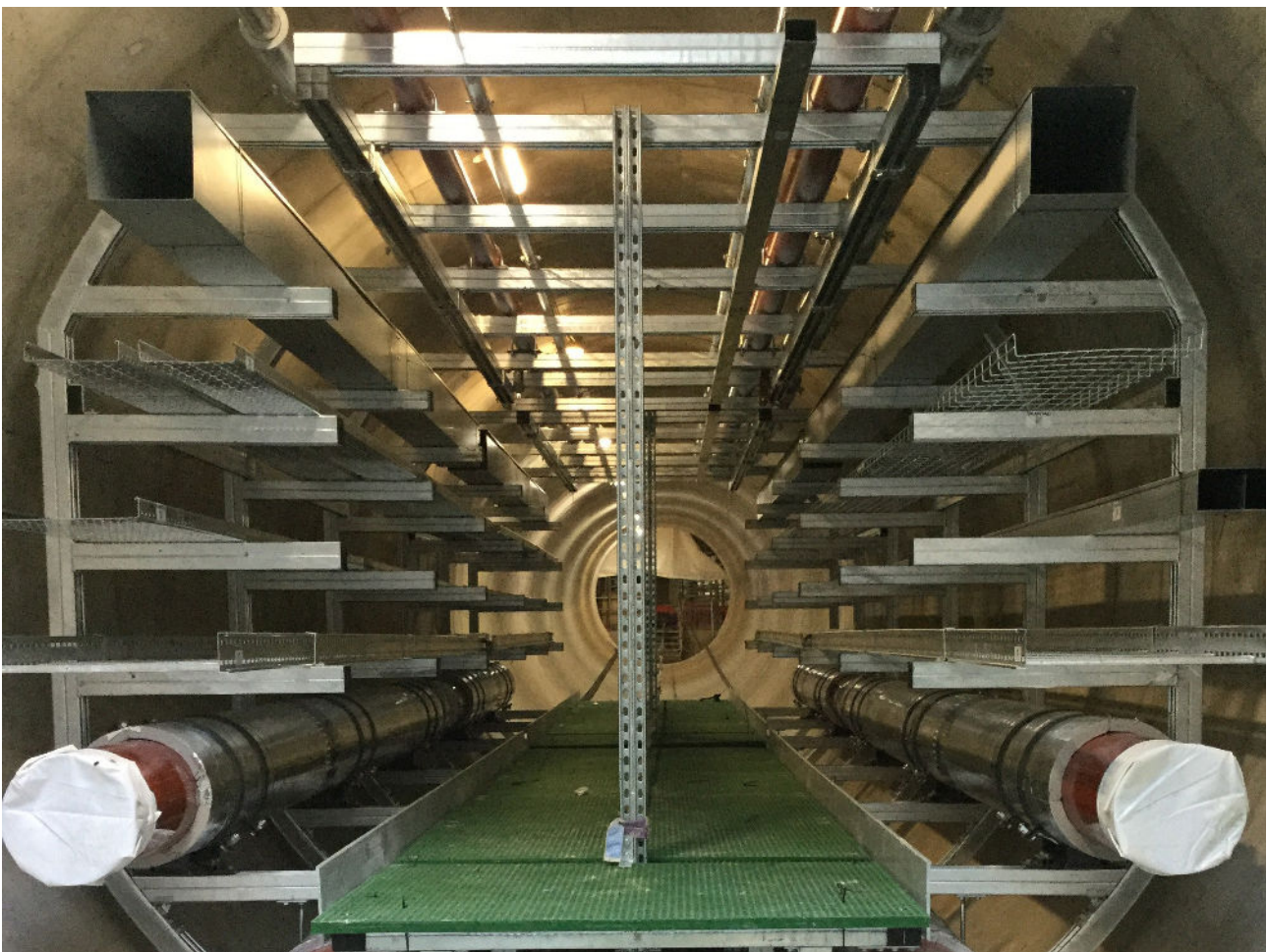
Design for Manufacture and Assembly

Atkore Unistrut & Marco are dedicated to delivering the correct solution for your project.

From single support frames to complete modular schemes, Atkore Unistrut & Marco's DfMA solutions are engineered and assessed for purpose, delivered in the highest quality product on time and to program.

DfMA can increase the quality compared to conventional methods through repeatability in production and quality control methods.

The biggest advantage is the reduction in installation time against program. Significant reduction in programme time required meets the rigorous demands of modern project timelines.



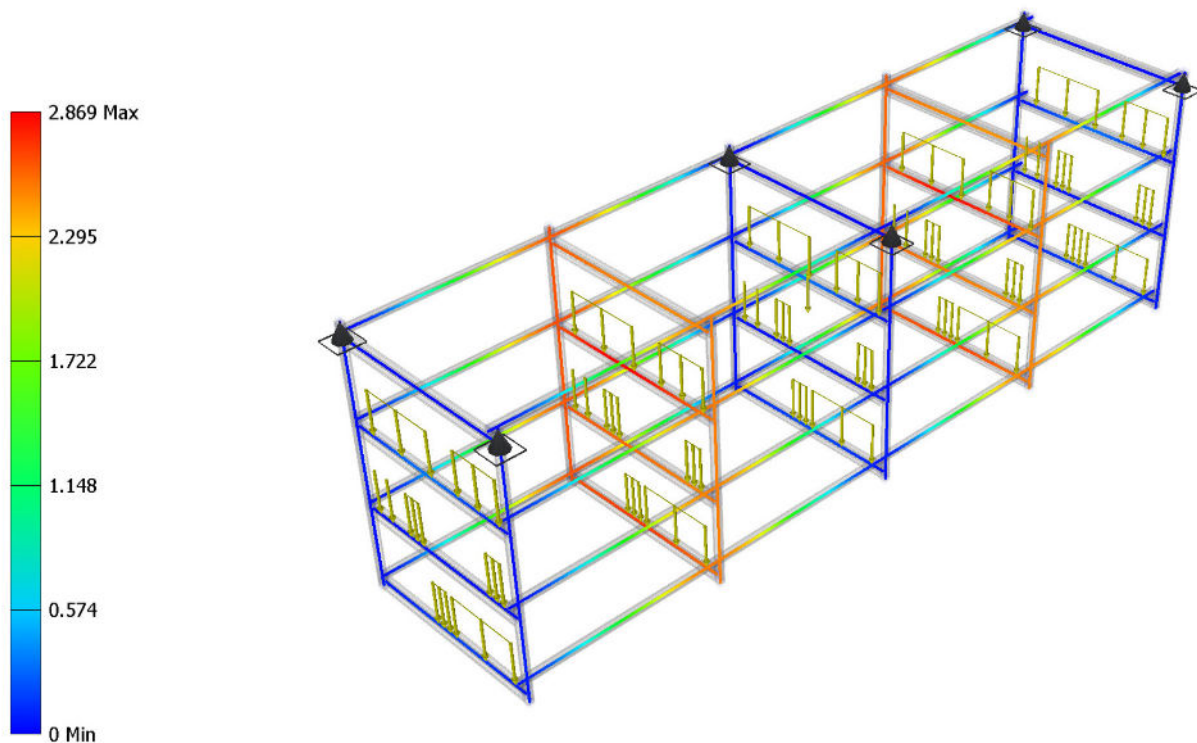
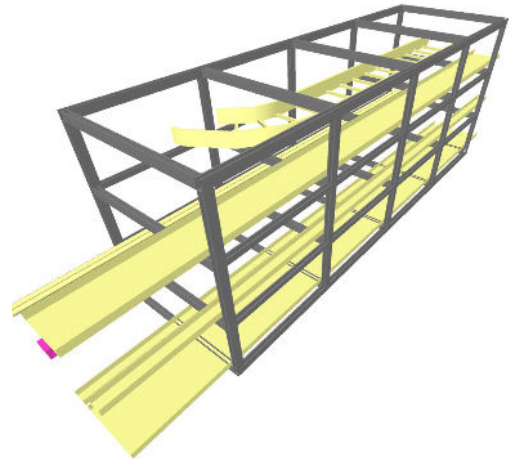
FEA

Finite Element Analysis

Atkore Unistrut & Marco's DfMA solutions all undergo Finite Element Analysis, this allows us, the manufacturer and you, the client to understand how the business' deliverable works in the real world.

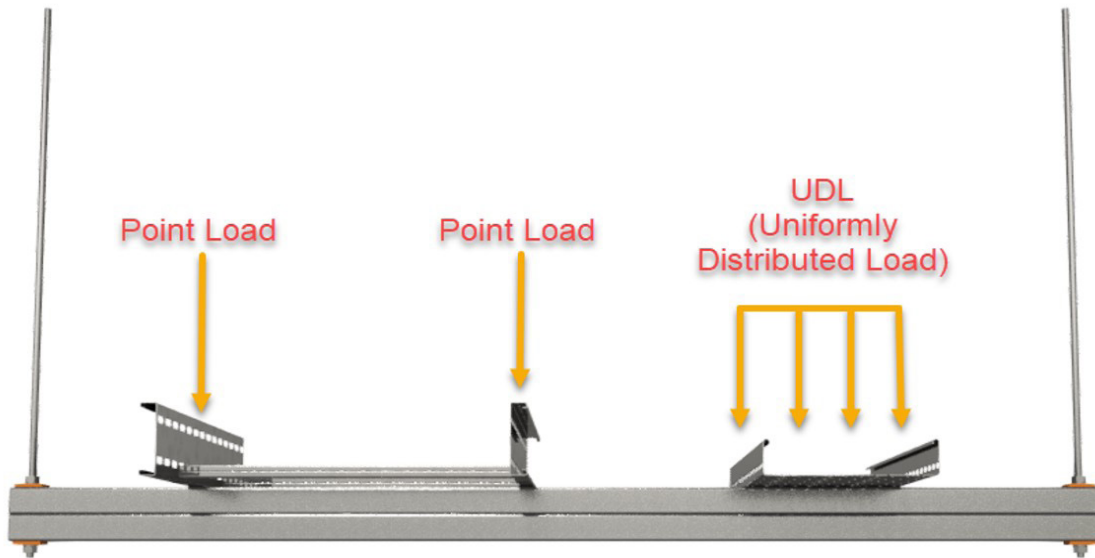
DfMA has been undertaken by Atkore Unistrut & Marco in the most demanding of projects from major Infrastructure projects through Healthcare to Nuclear where long design life considerations are paramount.

Whilst modelling, constraint and loading on the the designs in an 'as built' or 'as installed' state, the business can eliminate points of failure and ensure that the design is not over engineered but engineered correctly to allow ease of installation and confidence that the solution works through the warrantied period and beyond.



Understand your load

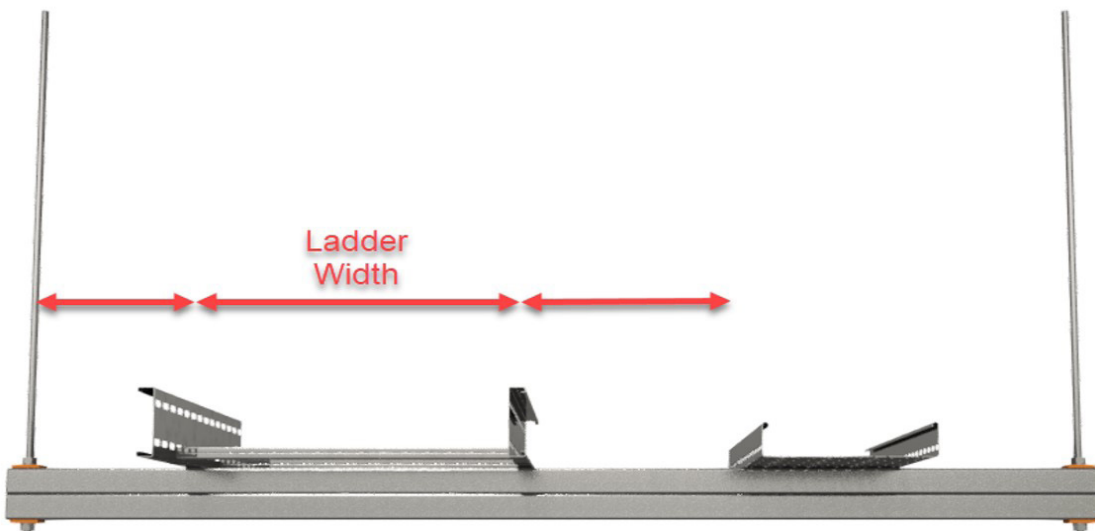
Best Practice



What is your load type? UDL or Point load.

▲ A UDL is a Uniform load distributed evenly across the width of your supporting services.

▲ A Point load is when the load directly transfers weight on to the Unistrut support channel in one singular direction.



Width from service distances. Working from the left;

1, Distance from threaded rod to initial service type

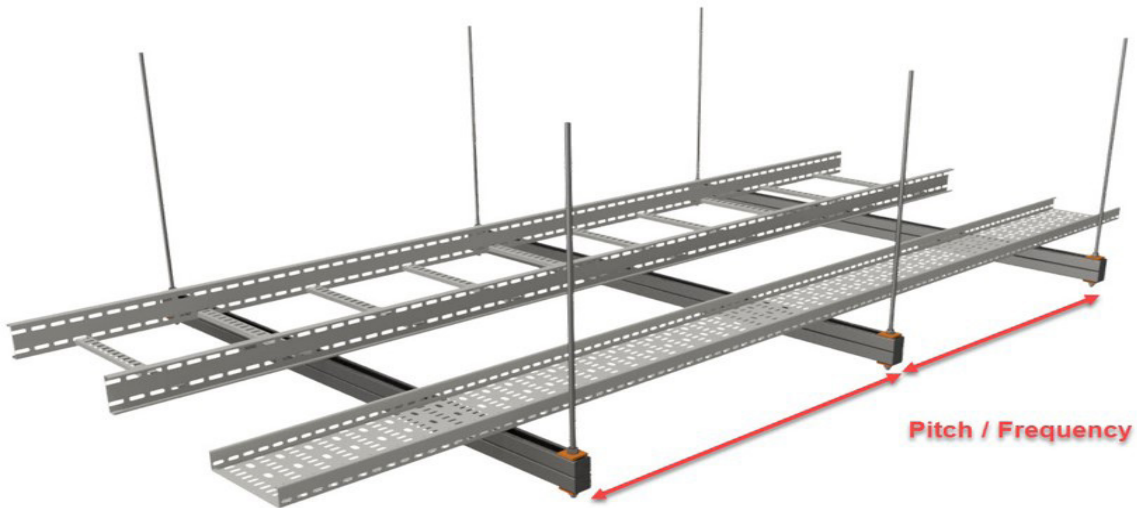
2, Width of service

3, Width of distance between current service and next supported service

Top tip: Ensure that you are using the correct load type.

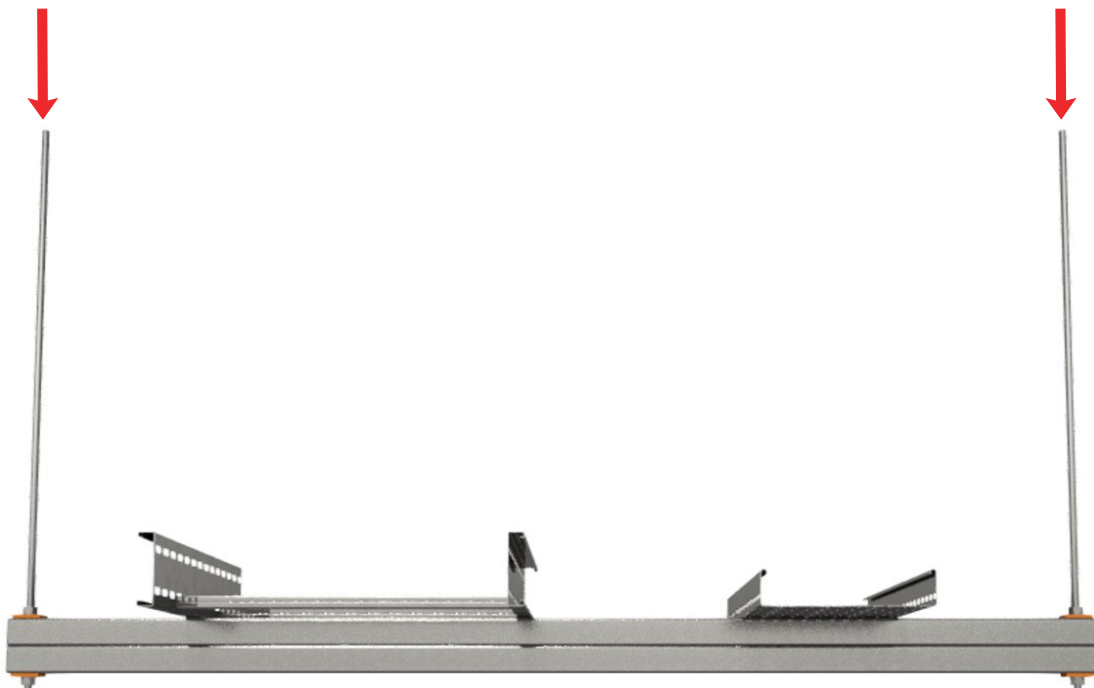
Understand how load transfer works

Best Practice



What are your support centres between channels?

Consider your distance between supports. Weight of services should be multiplied by support distances to give true reflection of loads on M&E services per channel.



Consider the load transfer to the threaded rod.

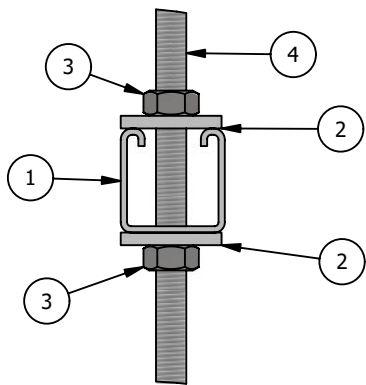
Your load will transfer from the Unistrut channel to the threaded rod. Ensure that you select the correct threaded rod capable of taking the load.

Top tip: Consider your anchors and or other fixings types within the soffit. Work to your limiting factors.

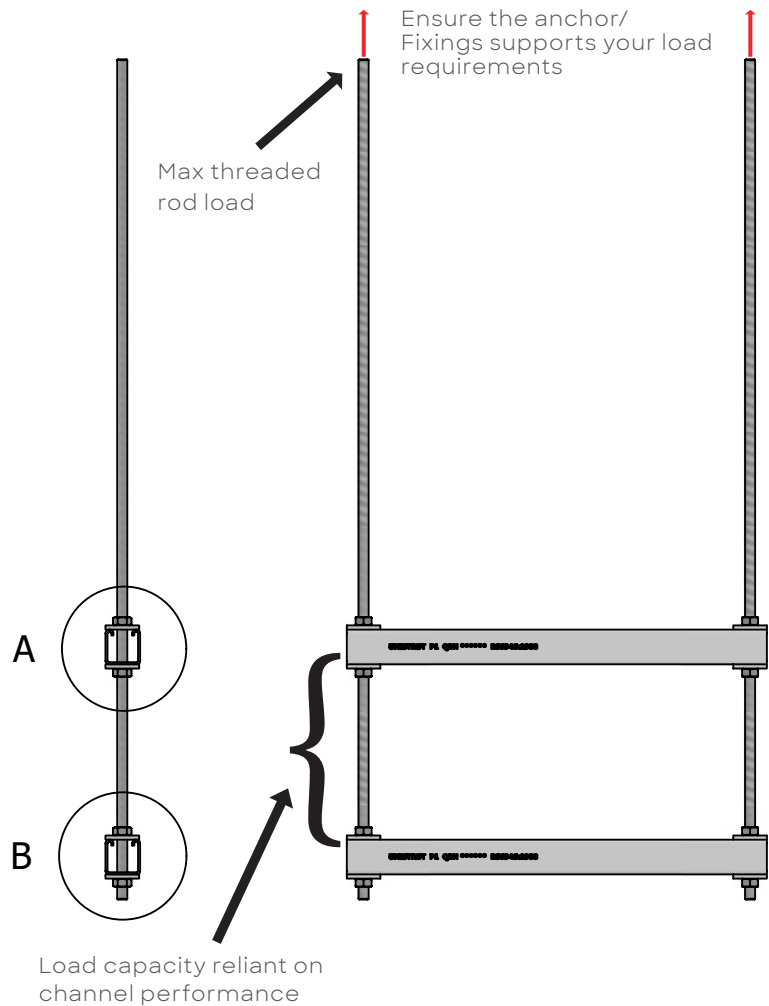
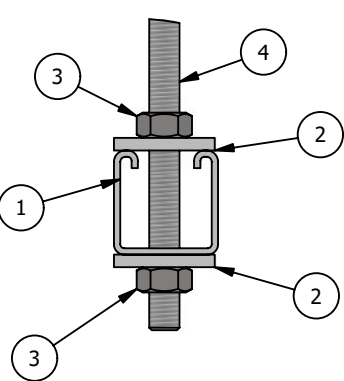
Tiered Trapeze

Best Practice

DETAIL 'A'(1/3)



DETAIL 'B'(1/3)



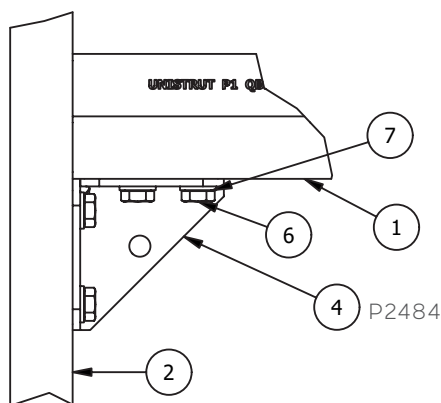
Parts List		
Item	Part Number	Description
1	Channel X 'Length'	Unistrut Channels P1000, P3300, P5500
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	Hex Nut
4	M12X1000HDG	HDG M12 Threaded Rod

Threaded Rod	
Size	Safe Working Load (kgs)
M8	448
M10	709
M12	1030

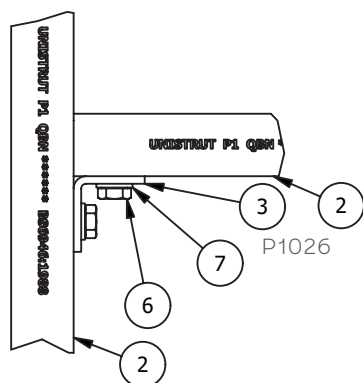
H Frame

Best Practice Considerations

DETAIL 'A' (1/5)

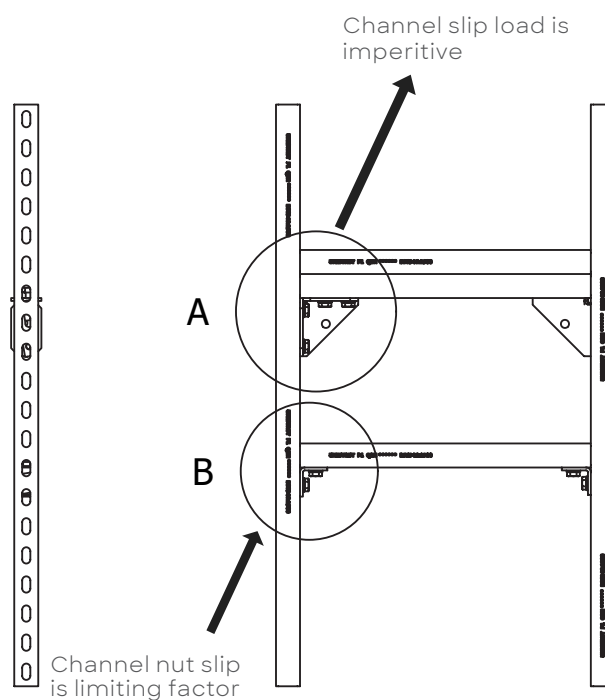


DETAIL 'B' (1/5)



Bracket type dependent on slip load required
Double Channel Nut = Double performance in slip

Parts List		
Item	Part Number	Description
1	Channel THG x Length	Unistrut Channels P1001, P3301, P5001 and P5501
2	Channel THG x Length	Unistrut Channels P1000, P3300, P5000 and P5500
3	P1026HG	Unistrut Angled Fitting P1026
4	P2484HG	Unistrut Angled Fitting P2484
5	PNP12HG	Unistrut PNP12 Channel Nut
6	9333M12	Hex-Head Bolt
7	1253M12	Washer



Please note: Load capacity is reliant on channel performance

Threaded Rod	
Size	Safe Working Load (kgs)
M8	448
M10	709
M12	1030

Z.P/HDG FINISH MILD STEEL in 2.5mm Channel Nuts			
Part	Size	Slip Load	Pull Out Load
		In PG/HG Channel	
PNP06**	M6	0.44kN (44.8Kg)	4.20kN (428Kg)
PNP08**	M8	1.40kN (142.8Kg)	4.70kN (479.4Kg)
PNP10**	M10	3.00kN (306Kg)	6.00kN (612Kg)
PNP12A**	M12A	1.7kN (173.4Kg)	8.00kN (816Kg)
PNP12**	M12	3.50kN (357Kg)	10.3kN (1050Kg)

Atkore Unistrut & Marco

Materials & Finishes



Hot Dipped Galvanised HG

Processed in accordance with BS EN ISO 1461: 2009. It is an excellent solution for outdoor environments and has a unique metallurgical structure which gives outstanding resistance to mechanical damage. *55µm minimum thickness.

Stainless Steel SS

Stainless steel to 1.4404 (316L) standards. Excellent for marine applications and extreme environmental conditions. Pickle & Passivate is available upon request.

Zinc Dichromate ZD

Often used for clean rooms, Data Centres and other sterile environments.

Zinc Plated ZP

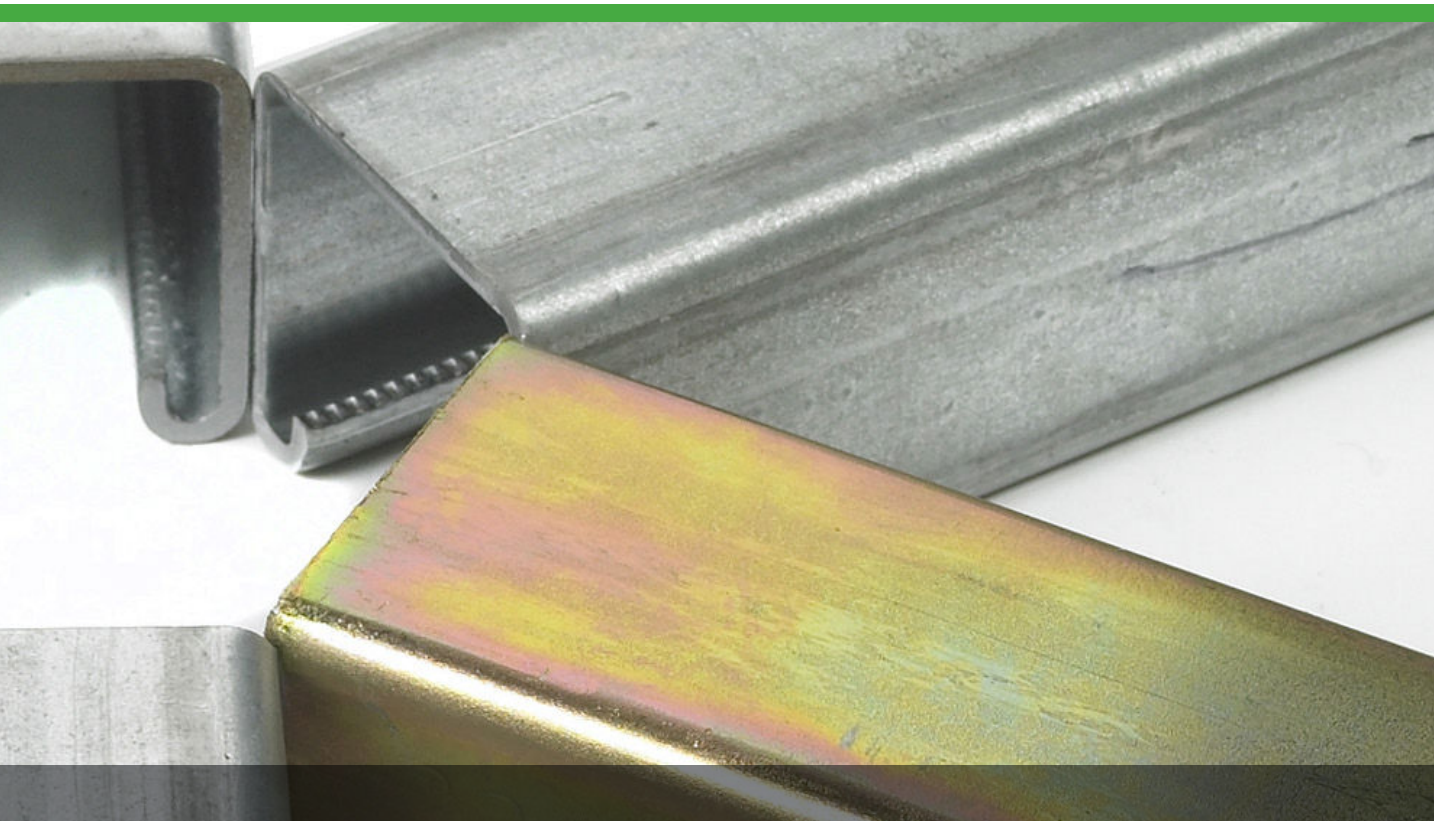
An alternative to a Pre Galvanised product and generally used for internal applications. Zinc Plated applications are often used in sterile environments. Electroplated EN 12329.

Zinc Magnesium ZM

Coated to standard EN10346-2015, Zinc-Aluminium-Magnesium is a coating whose main component is zinc, and the content of aluminium and magnesium is between 1.5-8% (where the magnesium content is not less than 0.2%). Compared with traditional coatings such as Hot-Dip Galvanising and Pre-Galvanised Steel, Zinc-Aluminium-Magnesium coated steels boast better corrosion resistance and self-healing properties. Ideal for extreme environmental conditions or high specification applications.

Materials & Finishes

Materials & Finishes



Zinc Aluminium* ZA

Coated to standard EN10346-2015

Zinc-Aluminium offers excellent coating resistance compared to traditional Zinc coatings.

Zinc Aluminium typically offers a coating which is 95% Zn & 5% Al. Perfect for outdoor applications.

*ZA available in Steel Wire Cable Tray only.

Plain Oil PO

Plain oil to BS EN 10025 standards. Pickled & Oiled with a min. yield 280 n/mm². Excellent for welding and finishing on site. Ideal base for powder coating and other surface finishes.

Pre Galvanised PG

The most popular finish, generally used for internal applications. Pre Galvanised to Z275- BS EN 10346 1.0244 standards. Supplied with a zinc coating to a nominal coat of 20µm.

Deep Galvanised DH

Processed in accordance with BS EN ISO 1461:

2009 to a greater thickness than the standard Hot Dipped Galvanised, it is an excellent solution for outdoor and harsh environments. *75 - 85µm minimum thickness.

Powder Coated PC

A variety of powder coating finishes are available. Often used to provide a pleasing aesthetic finish to projects such as shops and retail environments.

Deep Galvanised - 120µm+ DH+

Extra Deep Galvanised on silicone rich steel to a depth of 120µm+. Please consult the Atkore Unistrut Technical Team for predicted lifespan.

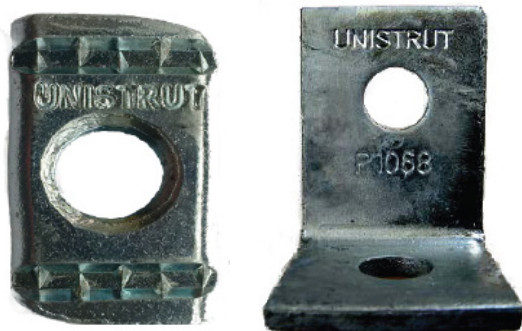
Cost of Ownership

BS6946:1988 Specification for Product Marking

The standard requires that products are stamped with BS 6946:1988 and also the name of the manufacturer. We at Atkore Unistrut show that the standard is achieved by rolling the channel with the part number along with the full name of the Standard BS6946:1988, and also our own UNISTRUT® branding. This is, as it should be, stamped into the Channel to ensure that you can clearly identify our product over the inferior product that is creeping into the market place.



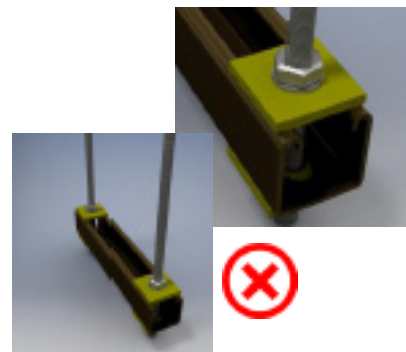
The engraving should also be clearly visible at all times, even when the product has undergone further finishing treatments i.e. Hot Dip Galvanised, Epoxy Coating. Contractors and distributors should be aware of cheap imported and non-standard products that have removable or no product marking at all, as this is not within the Standard.



The support Channel System is normally the product that supports the majority of the building services in any installation. We know how important this product is to any installation, and how important it can be to have confidence in the pedigree of the material used, so we use a QBN (Quality Batch Number) stamped on every length of Unistrut that we manufacture. With this code we can trace the material used back to the original coil supplied and back to the mill certificate. This means you have peace of mind whenever you supply Unistrut product it meets the performance that we publish.



It clearly shows you that we take ownership of these products and that these products, when used in a total Unistrut metal framing solution qualify for our 10 year warranty*.



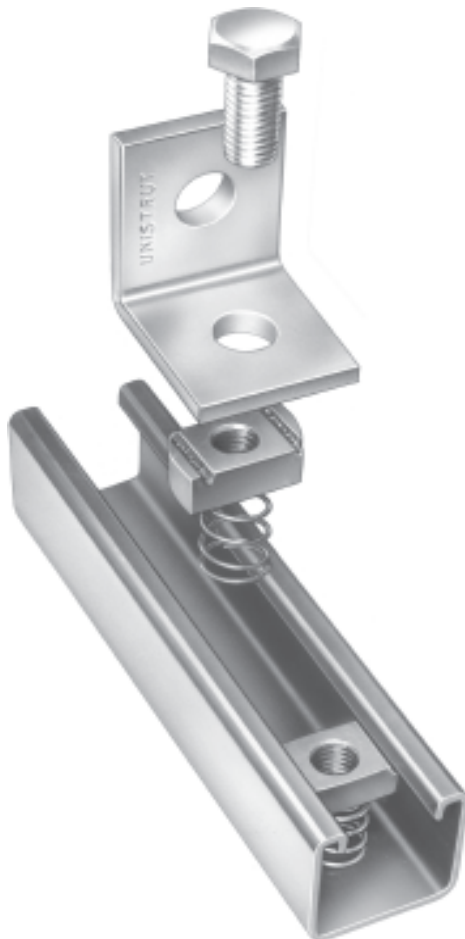
Using any non Unistrut approved part, even a fitting, voids the warranty.



Full Unistrut system – eligible for 10 year warranty*.

Cost of Ownership

Look out for these features



Make sure you use Unistrut® stamped channel nuts to ensure full system integrity.

Large chamfer in the nut eases starting of bolt. Special shaped inturned edges and tapered, serrated grooves produce strong vice-like grip between channel and nut. Strut edges and nut's tapered grooves act as guides to provide positive alignment of connection.

- Nut teeth grip the Strut's inturned edges, tying the channel sides together in a "box" configuration for added strength
- Longitudinal movement of nut is resisted as hardened teeth bite into the inturned edges
- Spring allows precision placement anywhere along Strut length then holds nut in position while connection is completed the installer's "third hand"

Torque Settings

Unistrut torque setting guidance

Make sure you use Unistrut® stamped channel nuts to Torque setting of nuts or bolts should follow the best practice rules below.

Beam clamps

It is essential that these are torqued to the correct level for the published load data to apply, these can be found on the appropriate data sheet for each beam clamp design. This includes, but is not limited to, Unistrut P2785 series P1796 series P3087 P2489 P1272 UBC (FL2 type) and FLS. A full library of data sheets of products to be used on site will be issued at pre commencement stage if requested.

Framing

When using the Unistrut channel nut system to build a frame or a joint with High Tensile bolts, the torque settings in the Channel nut guide should be used to ensure performance to the published figures. This includes all Flat fittings, U and Z fittings, Angled fittings and Base/Wing fittings.

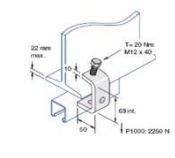
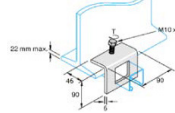
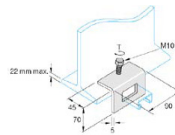
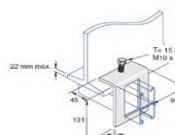
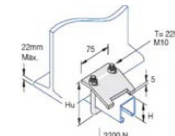
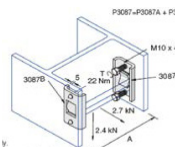
Splicing of channel

When splicing channel together in order to consider the beam as continuous a P1377 splice, M12x 25 HT Hex sets with Unistrut PNP/PNL12 Channel nuts must be used torqued to the correct level.

Drop rods & Trapeze

When instructed by a client to have a torque setting for Mild steel Drop rods and Trapeze construction, then a level of between 26Nm and 28Nm for M10 applications should be employed. If High Tensile rod is used then refer to the Unistrut channel nut guide for correct level of torque.

If specialist anti vibration washers are used then Manufacturers Torque settings should be observed. For on-site construction of a trapeze system for non-vibrating loads clamping the channel top and bottom with a Unistrut P1020 where torque setting is impracticable then tightening with a wrench ensuring that a firm clamping action has been achieved is acceptable.

Part Number	Finish	Torque Setting
P1271		20 Nm
P1796		15 Nm
P1796A		15 Nm
P1796B		15 Nm
P2785 P2786 P2787		22 Nm
P3087 P3087A P3087B		22 Nm

Trapeze Torque Settings	
Rod DIA	Class 4.8
M6	6Nm
M8	15Nm
M10	26Nm
M12	36Nm

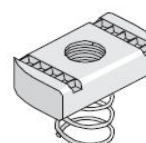
Torque Settings

Channel Nut Torque Settings

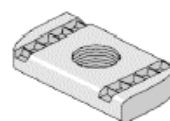
Part Number	Finish	Torque Setting
PNL06	ZP/HDG	12 Nm
PNS06	Stainless Steel	6.5 Nm
PNP06		
PNL08	ZP/HDG	28 Nm
PNS08	Stainless Steel	16 Nm
PNP08		
PNL10	ZP/HDG	55 Nm
PNS10	Stainless Steel	31.5Nm
PNP10		
PNL12A	ZP/HDG	60 Nm
PNS12A	Stainless Steel	55 Nm
PNP12A		
PNL12	ZP/HDG	70 Nm
PNP12	ZP/HDG	70 Nm
PNP16	ZP/HDG	125 Nm



PNL **



PNS**



PNP**

Metric Hex/Head Screws

Hex/Head Screws

Key to Part Numbers		
933 DIN STANDARD		
3/4/5	Finish	3 = Hot Dip Galvanised 4= Stainless Steel 316 5= Electro Zinc Plated
	Thread	M6, M8, M10, M12, M16
	Length	LENGTH IN MM

Example part code and description hot dip galvanised to BS EN ISO 1461					
DIN	Hot Dip Galv	Thread	x	Length (mm)	Code
933	3	6	x	12	93336x12
DIN	Stainless Steel	Thread	x	Length (mm)	Code
933	4	6	x	12	93346x12
DIN	Zinc Plated	Thread	x	Length (mm)	Code
933	5	6	x	12	93356x12

Selection of diameters – tightening torques & loads.

Guideline values for screws in steel groups A2-70 and A4-70 with standard metric threads to DIN 13.

Diameter	Load	Initial Stressing Force	Tightening Torque	Force in Service N		
	Force at 0.2% yield point N	N	Nm	Axial Static	Axial Dynamic	Radial Static or Dynamic
M6	9040	5700	7.3	2440	1470	490
M8	16470	10380	17.7	4450	2670	890
M10	26100	16440	35.5	7050	4230	1410
M12	37930	23900	61.3	10240	6150	2050

When selecting the correct screw diameter it should be ensured that the total load on the screw does not exceed 90% of the standardised 0.2% yield stress. Care should be taken to ensure correct initial tensioning, with a torque wrench wherever possible.

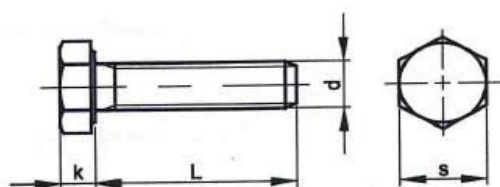
Experience has shown that a utilisation of 70% of the total load is reasonable average for the initial stressing force to allow additional forces in service to be taken up.

The table above is only intended as an aid for quick comparison

Metric Hex/Head Screws

Steel grade 8.8 High Tensile strength & torque figures

Isometric Coarse Threads	M6	M8	M10	M12
Pitch (mm)	1.00	1.25	1.50	1.75
Stress Area	20.10	36.60	58.00	84.30
Basic Effect Diameter (mm)	5.35	7.19	9.03	10.86
Ultimate Load Kgf	1642	2978	4731	6873
Ultimate Load KN	16.1	29.2	46.4	67.4
Proof Load KGF	1183	2162	3436	5088
Proof Load KN	11.6	21.2	33.7	49.9
Shear Strength KGF (60% of ultimate load)	985	1787	2839	4120
Shear strength KN	9.66	17.52	27.84	40.4
Torque to Induce load Kgf/M	1.19	2.9	5.74	10
Equal to 85% of proof load Nm	11.7	28	56	98
For bolts/set nuts in unplated condition IBF/FT	8.63	21	42	72



Thread Type	K	S
M6	4mm	10mm
M8	5.3mm	13mm
M10	6.4mm	17mm
M12	7.5mm	19mm

Specification:
Steel parts manufactured to BS EN 4017 Grade 8.8

Finishes:
Galvanised – Processed in accordance with BS EN 10684
Zinc Plated to BS EN ISO 4042

No Per Box:
100



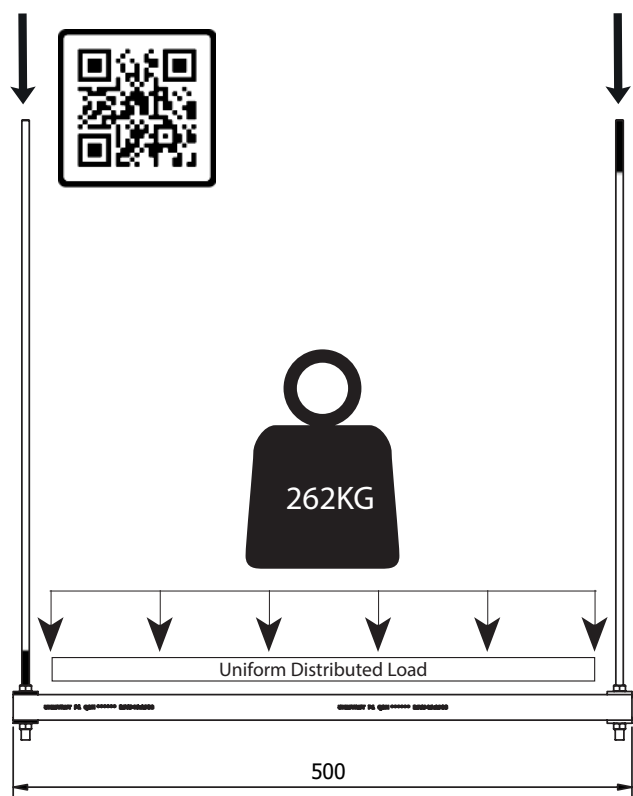
500mm

Trapeze

P3300T Trapeze

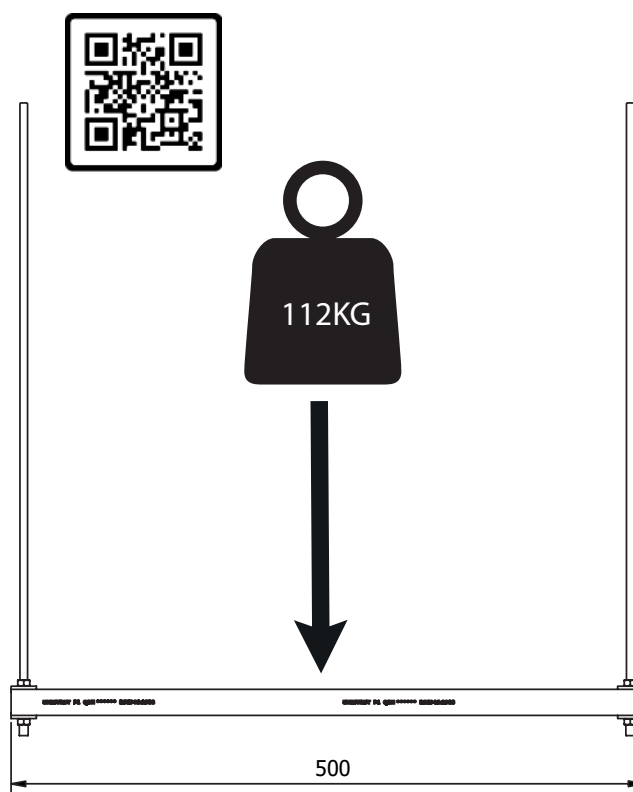
P3300T Trapeze/500mm

Load transfers at max UDL capacity
127kg

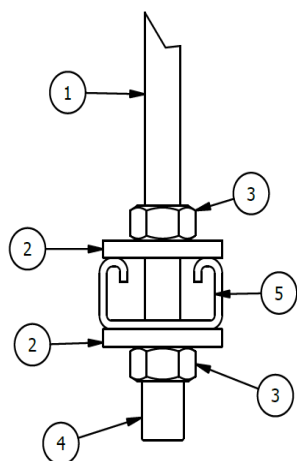


Span	KG	KN
500mm	262	2.56
Deflection	1.97mm	

127kg



Span	KG	KN
500mm	112	1.09
Deflection	1.1mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

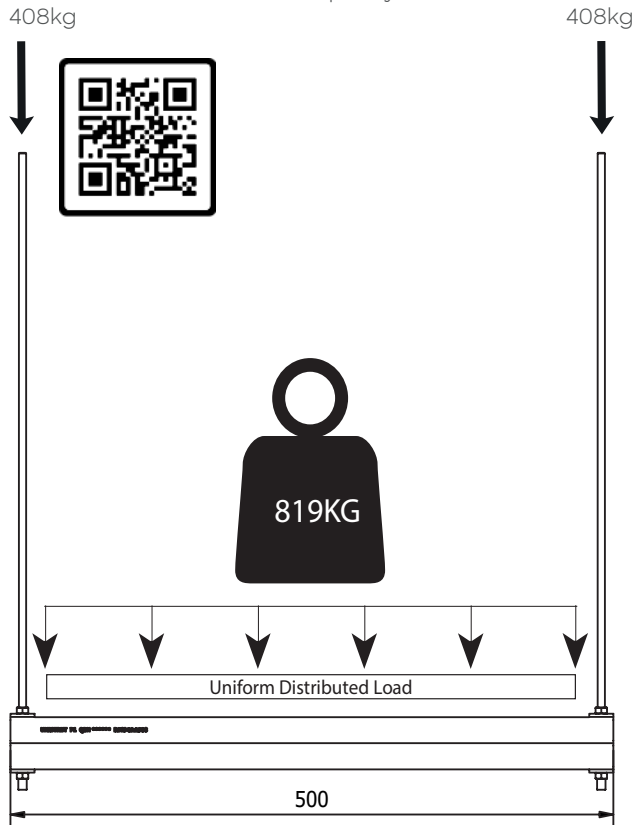
Item	Part Number	Description
1	M12*LENGTH* ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P3300TPGX500	Unistrut Channels P3300T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P1000T Trapeze

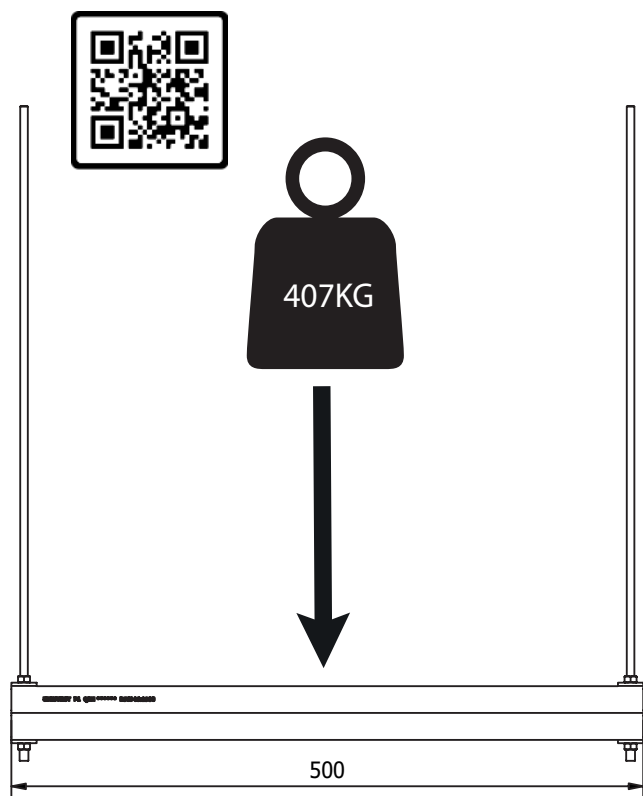
P1000T Trapeze/500mm

Load transfers at max UDL capacity
408kg

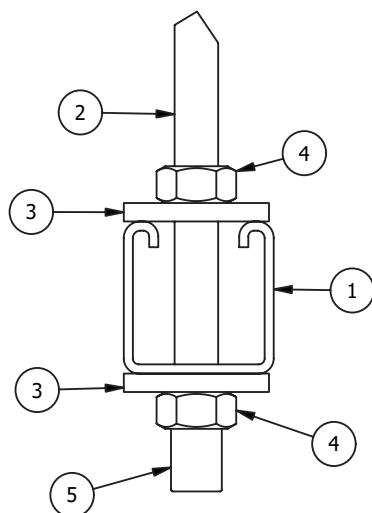


Span	KG	KN
500mm	819	8.03
Deflection	1.05mm	

408kg



Span	KG	KN
500mm	407	3.99
Deflection	6mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

Item	Part Number	Description
1	P1000TPG X 500	Unistrut Channels P1000T Slotted
2	M12X*LENGTH*ZP	ZP M12 Threaded Rod
3	P1020HG	Unistrut Flat Fitting P1020
4	9348M12	M12 Hex Nut
5	SCM12100	Threaded Rod End Cap

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.



750mm

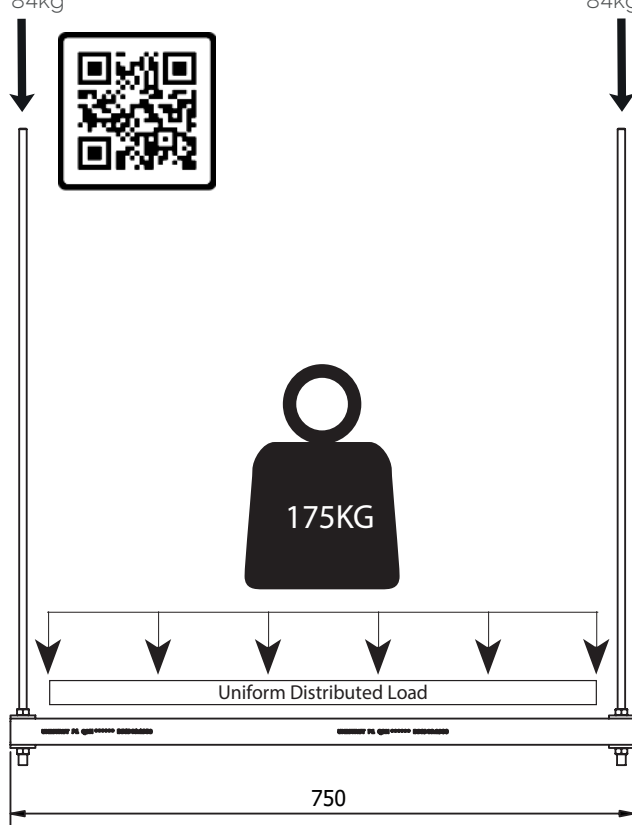
Trapeze



P3300T Trapeze

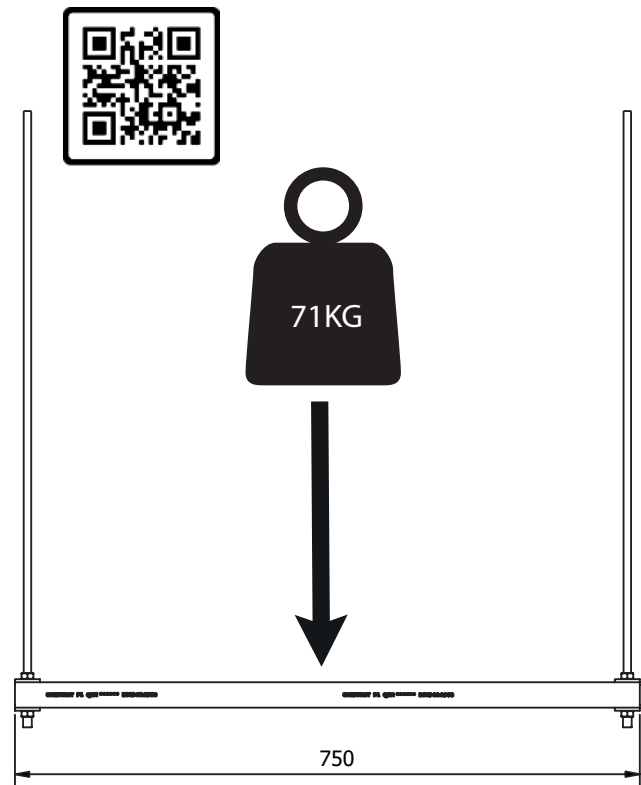
P3300T Trapeze/750mm

Load transfers at max UDL capacity
84kg

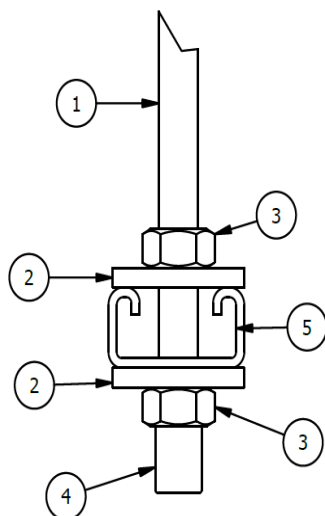


Span	KG	KN
750mm	175	1.71
Deflection	1.97mm	

84kg



Span	KG	KN
750mm	71	0.69
Deflection	2.1mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

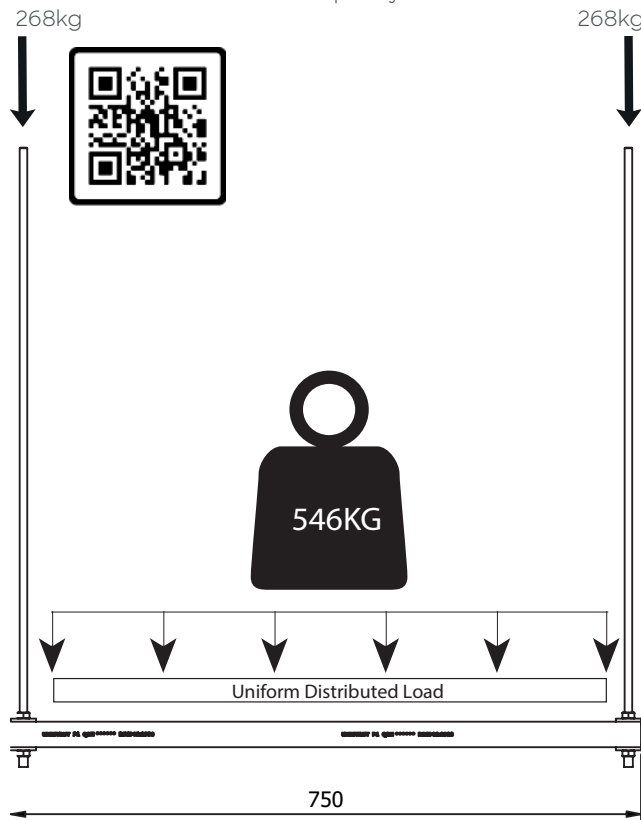
Item	Part Number	Description
1	M12*LENGTH* ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P3300TPGX750	Unistrut Channels P3300T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P1000T Trapeze

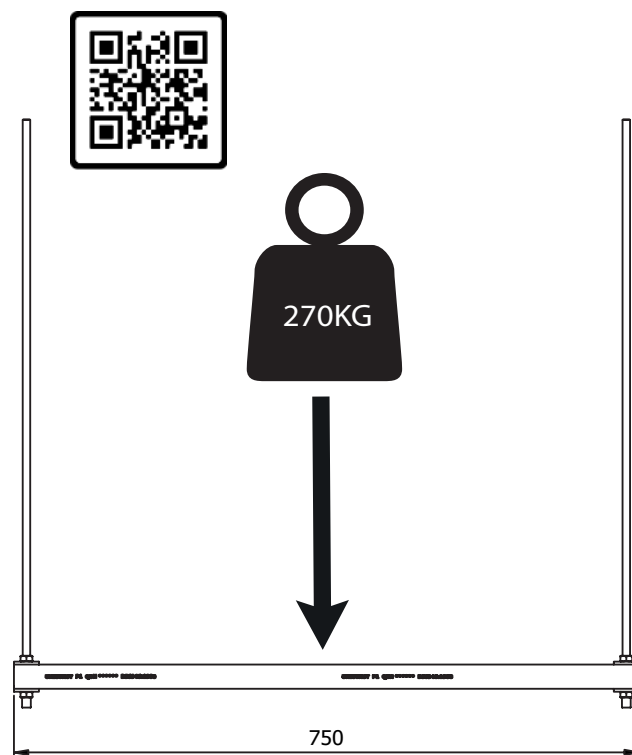
P1000T Trapeze/750mm

Load transfers at max UDL capacity
268kg

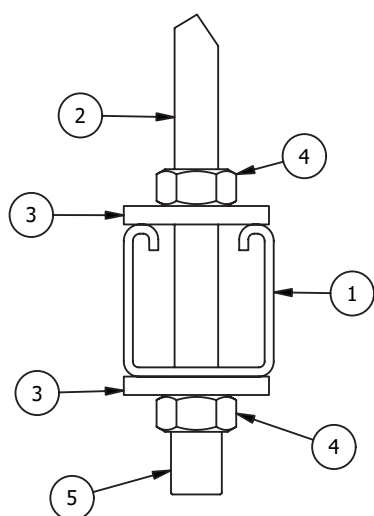


Span	KG	KN
750mm	546	5.35
Deflection	2.35mm	

268kg



Span	KG	KN
750mm	270	2.64
Deflection	1.2mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

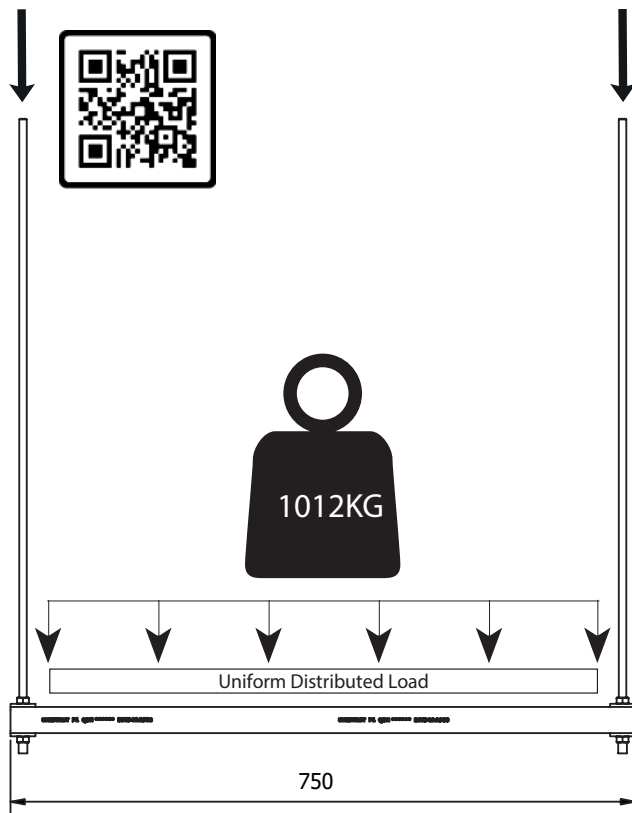
Item	Part Number	Description
1	P1000TPG X 750	Unistrut Channels P1000T Slotted
2	M12X*LENGTH*ZP	ZP M12 Threaded Rod
3	P1020HG	Unistrut Flat Fitting P1020
4	9348M12	M12 Hex Nut
5	SCM12100	Threaded Rod End Cap

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5500T Trapeze

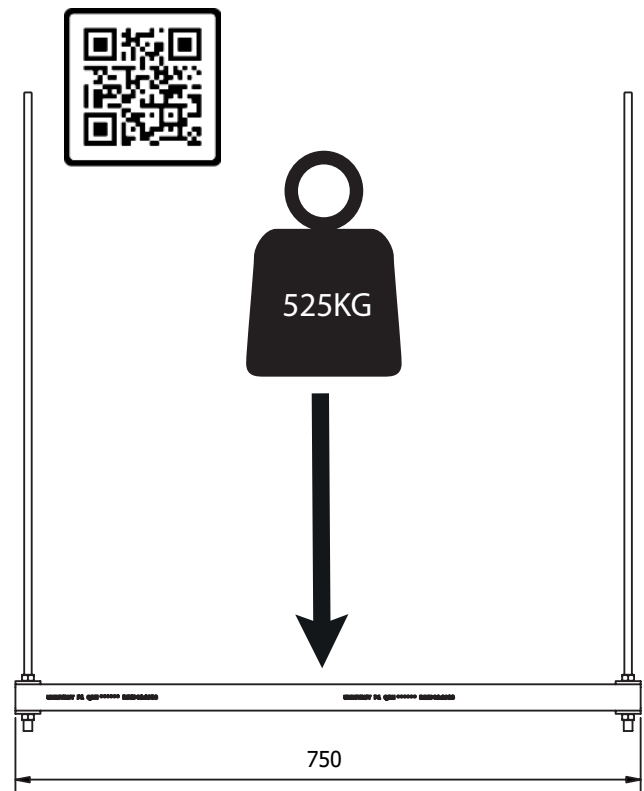
P5500T Trapeze/750mm

Load transfers at max UDL capacity
489kg

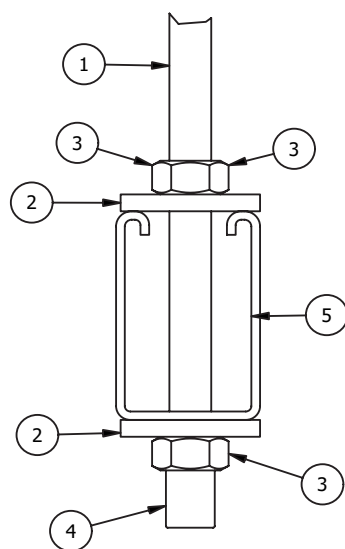


Span	KG	KN
750mm	1012	9.92
Deflection	1.5mm	

489kg



Span	KG	KN
750mm	525	5.14
Deflection	0.9mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

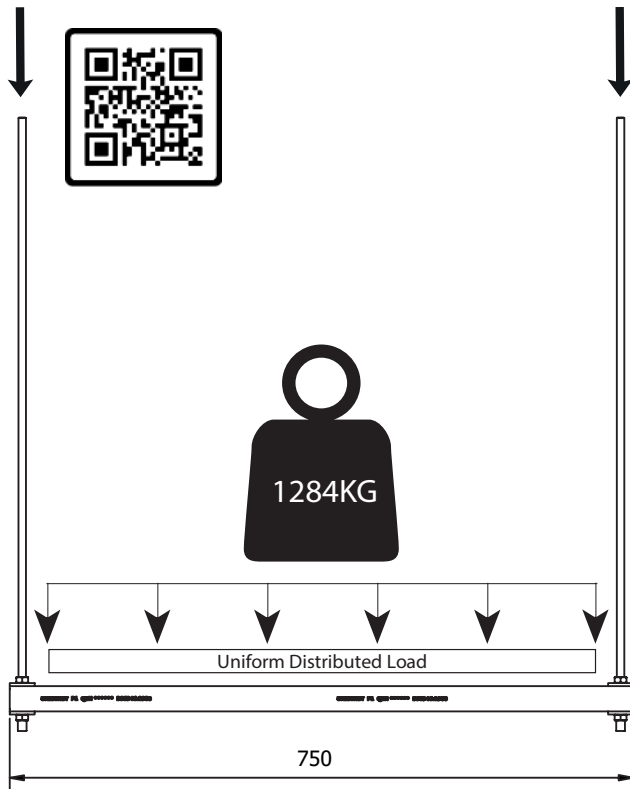
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5500TPGX750	Unistrut Channels P5500T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5000T Trapeze

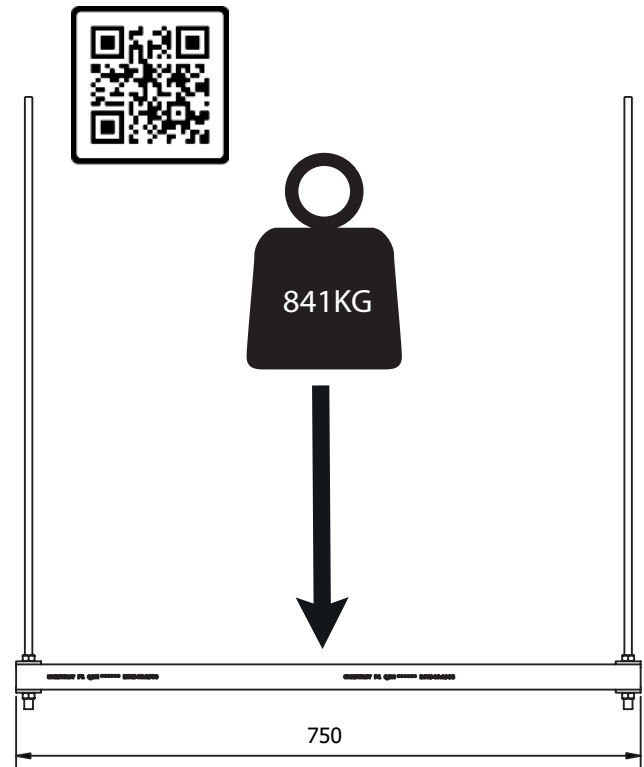
P5000T Trapeze/750mm

Load transfers at max UDL capacity
843kg

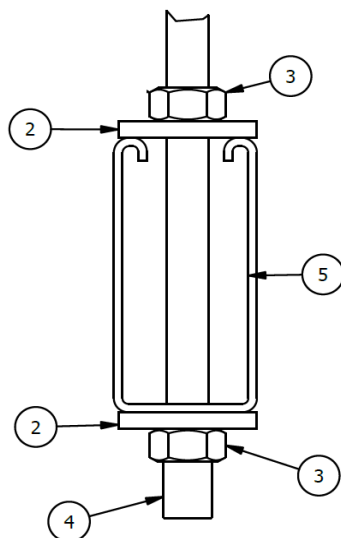


Span	KG	KN
750mm	1284	12.59
Deflection	0.89mm	

842kg



Span	KG	KN
750mm	841	8.24
Deflection	0.77mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

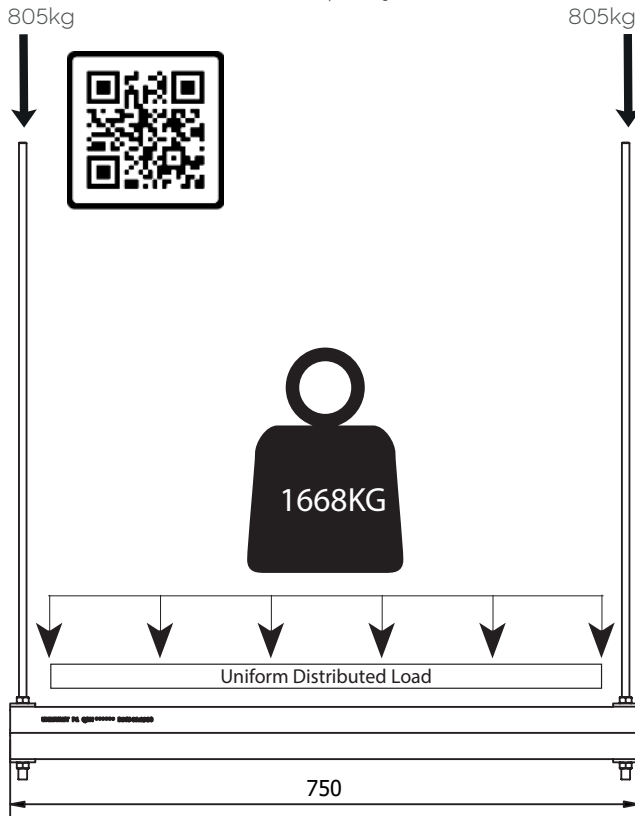
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5000TPGX750	Unistrut Channels P5000T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P1001T Trapeze

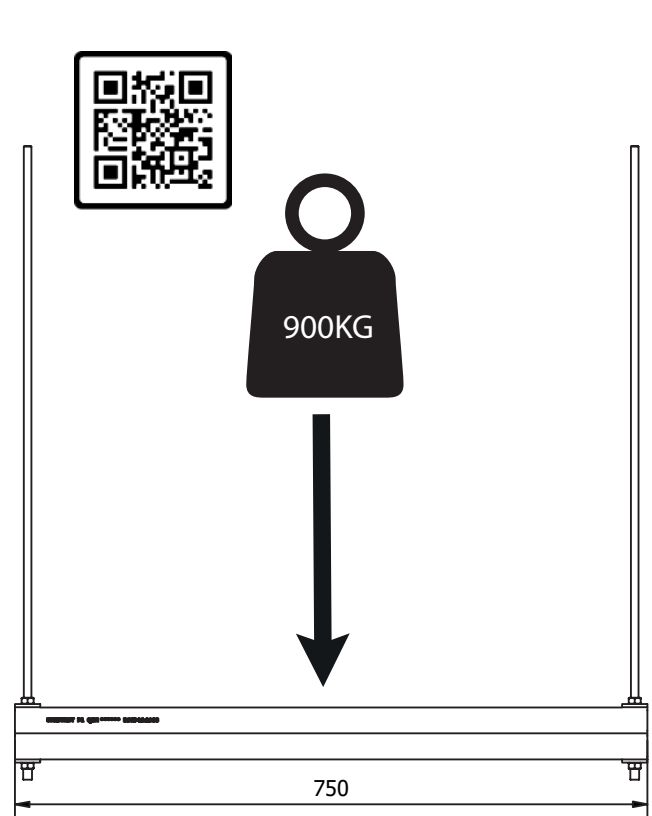
P1001T Trapeze/750mm

Load transfers at max UDL capacity
805kg

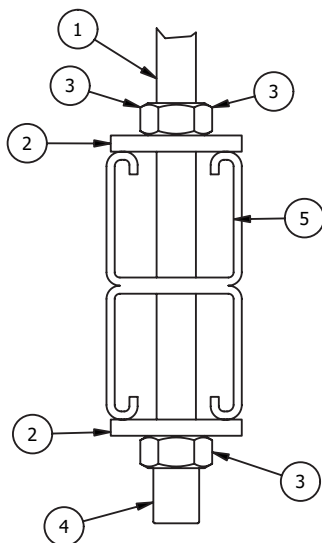


Span	KG	KN
750mm	1668	16.35
Deflection	1.21mm	

805kg



Span	KG	KN
750mm	900	8.82
Deflection	8mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List		
Item	Part Number	Description
1	M12*LENGTH* ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P1001TPGX750	Unistrut Channels P1001T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.



1000mm

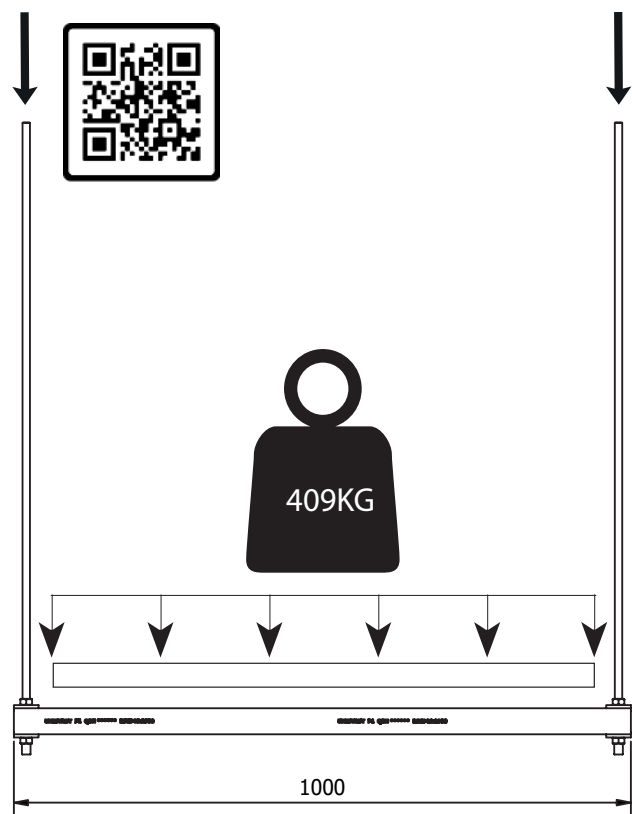
Trapeze



P1000T Trapeze

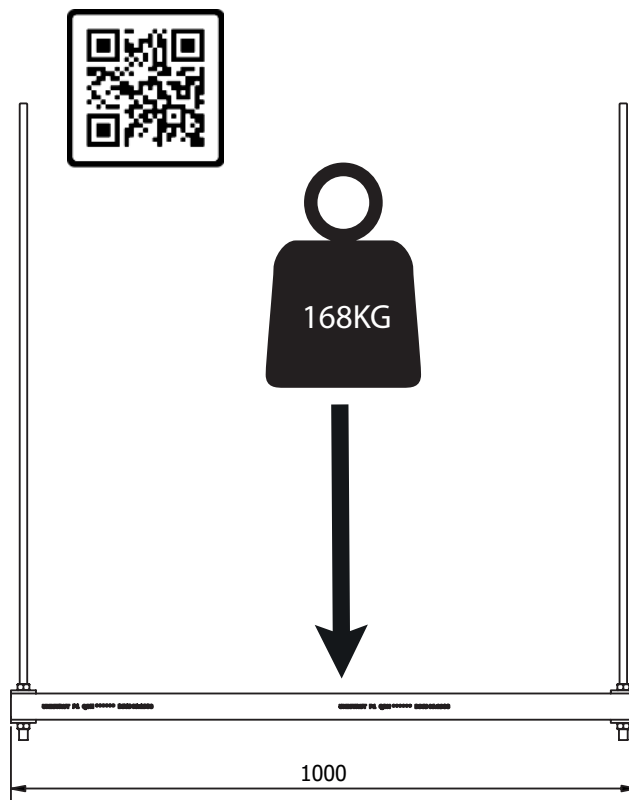
P1000T Trapeze/1000mm

Load transfers at max UDL capacity
202kg

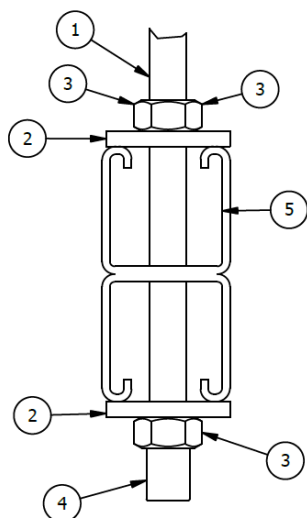


Span	KG	KN
1000mm	409	4.01
Deflection	4.18mm	

202kg



Span	KG	KN
1000mm	168	1.64
Deflection	2mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

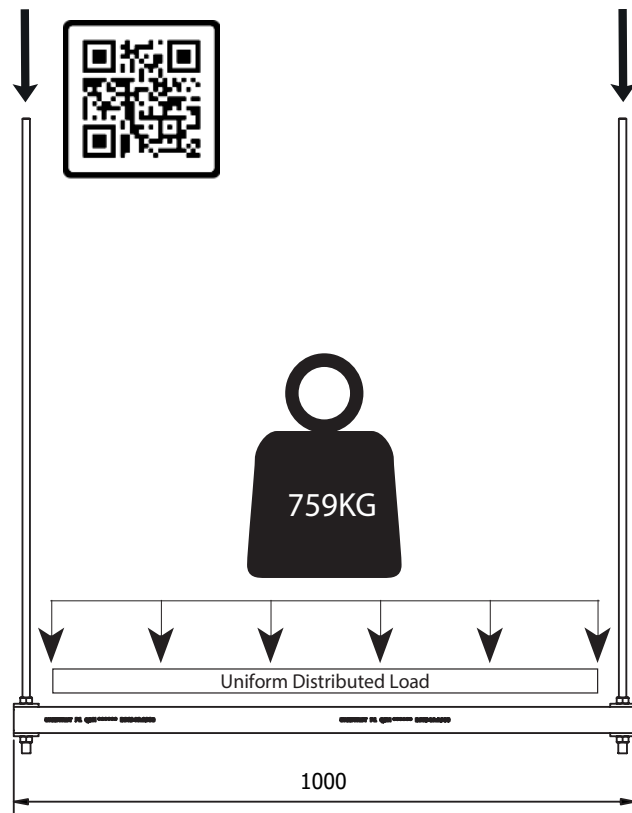
Item	Part Number	Description
1	M12X*Length* ZP	Unistrut Channels P1000T Slotted
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P1001TPG x 1000	Unistrut Channels P1001T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5500T Trapeze

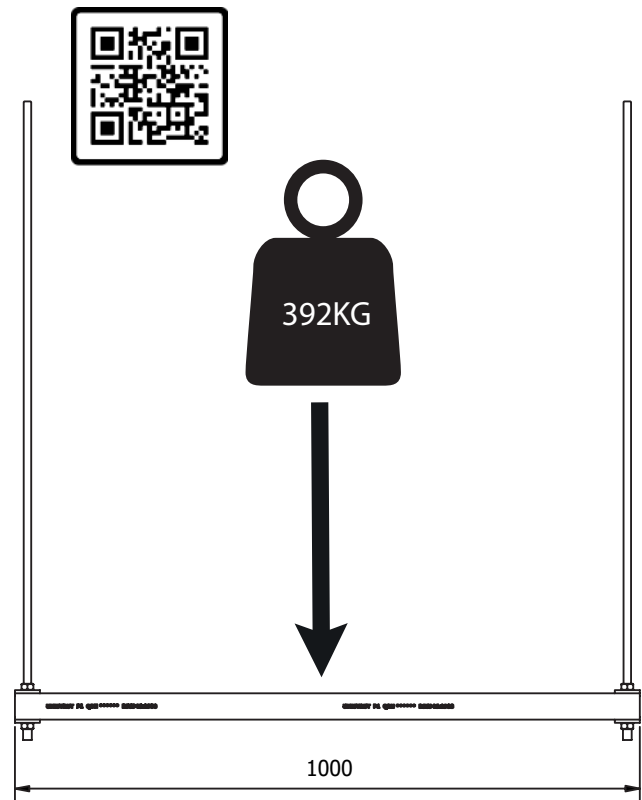
P5500T Trapeze/1000mm

Load transfers at max UDL capacity
359kg

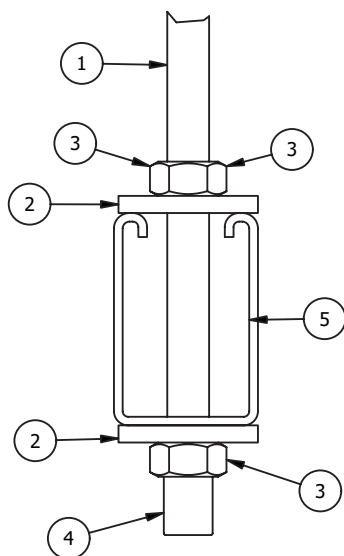


Span	KG	KN
1000mm	759	7.44
Deflection	2.67mm	

359kg



Span	KG	KN
1000mm	392	3.84
Deflection	1.6mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

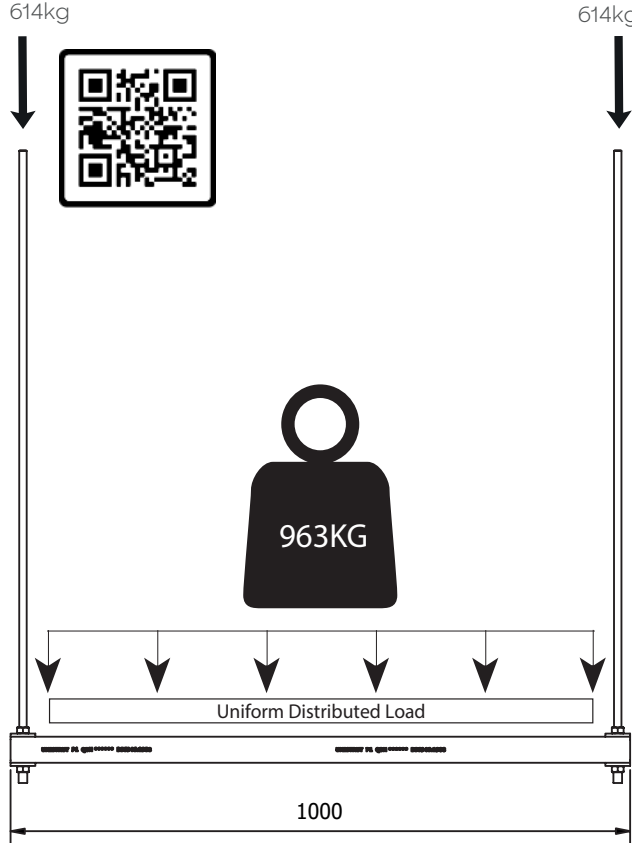
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5500TPGX1000	Unistrut Channels P5500T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5000T Trapeze

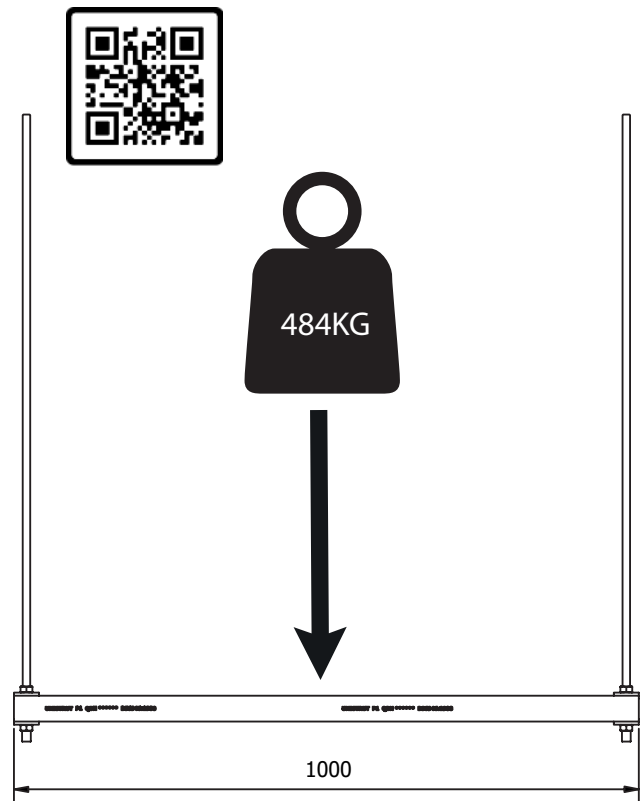
P5000T Trapeze/1000mm

Load transfers at max UDL capacity
614kg

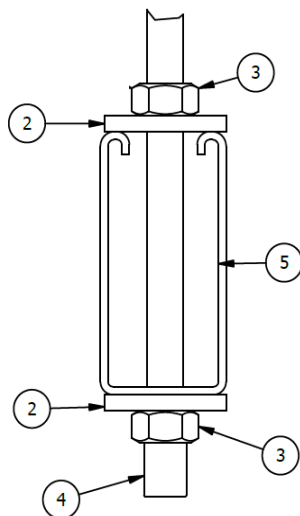


Span	KG	KN
1000mm	963	9.44
Deflection	1.59mm	

614kg



Span	KG	KN
1000mm	484	4.74
Deflection	0.9mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

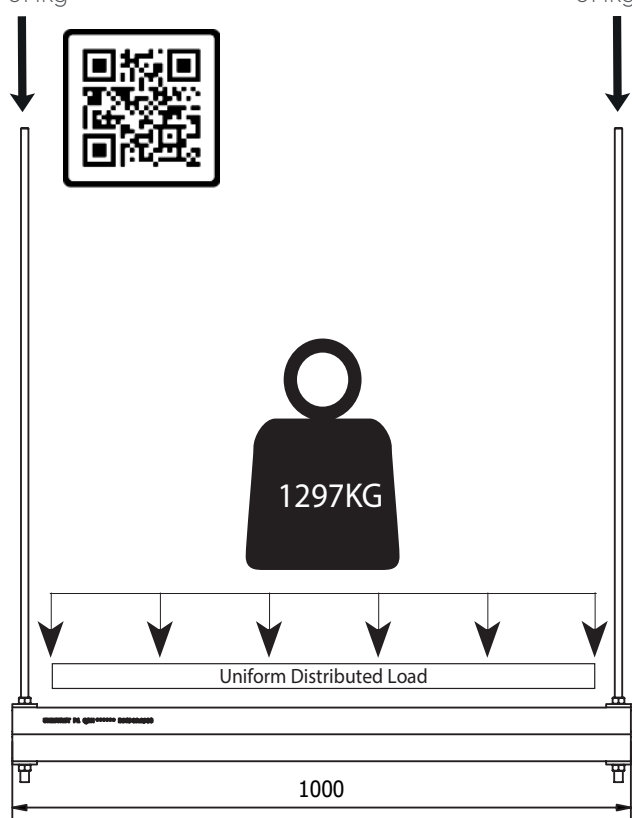
Parts List		
Item	Part Number	Description
2	M12X*LENGTH*ZP	ZP M12 Threaded Rod
3	P1020HG	Unistrut Flat Fitting P1020
4	9348M12	M12 Hex Nut
5	SCM12100	Threaded Rod End Cap
6	P5000TPGX1000	Unistrut Channels P5000T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P1001T Trapeze

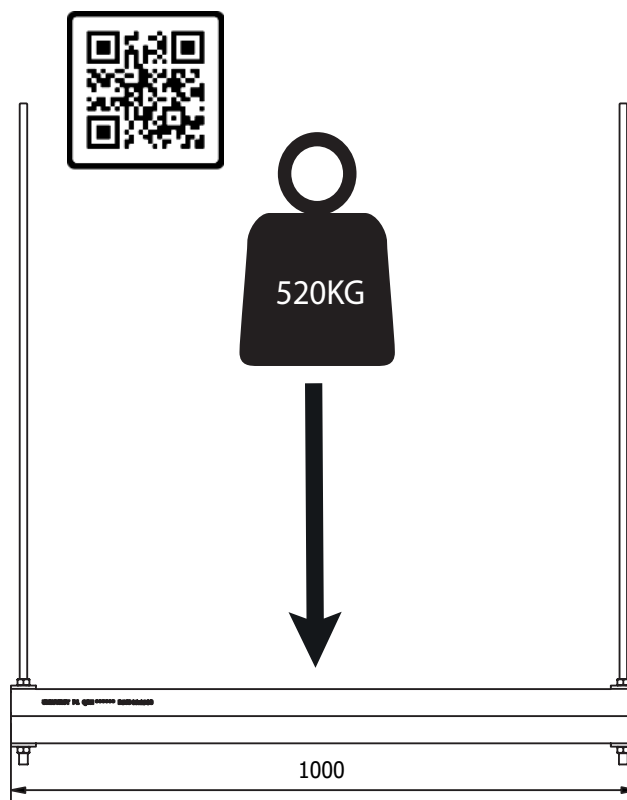
P1001T Trapeze/1000mm

Load transfers at max UDL capacity
614kg

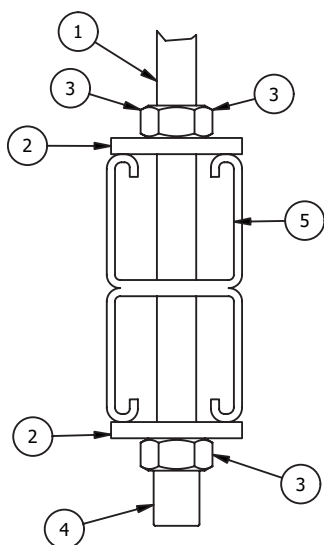


Span	KG	KN
1000mm	1297	12.71
Deflection	2.15mm	

614kg



Span	KG	KN
1000mm	520	5.09
Deflection	1mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List		
Item	Part Number	Description
1	M12*LENGTH* ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P1001TPGX1000	Unistrut Channels P1001T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.



1250mm

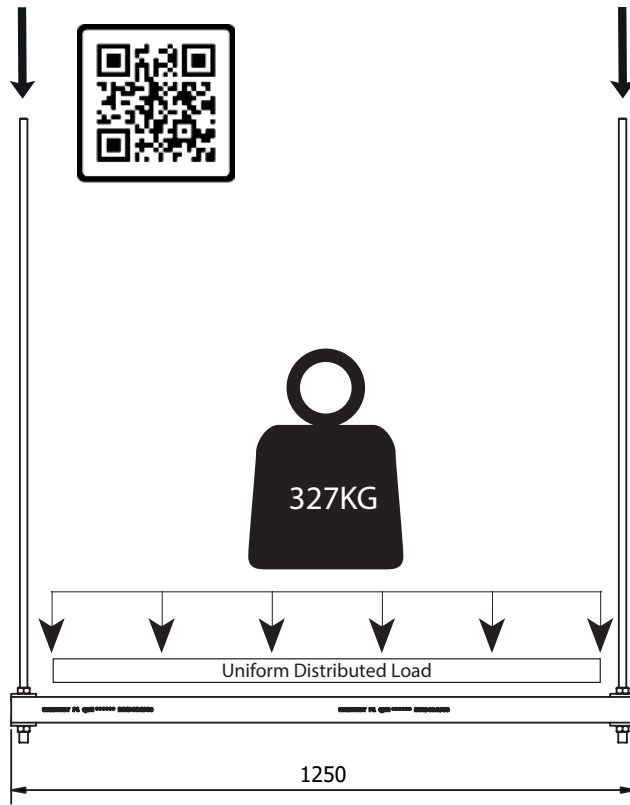
Trapeze



P1000T Trapeze

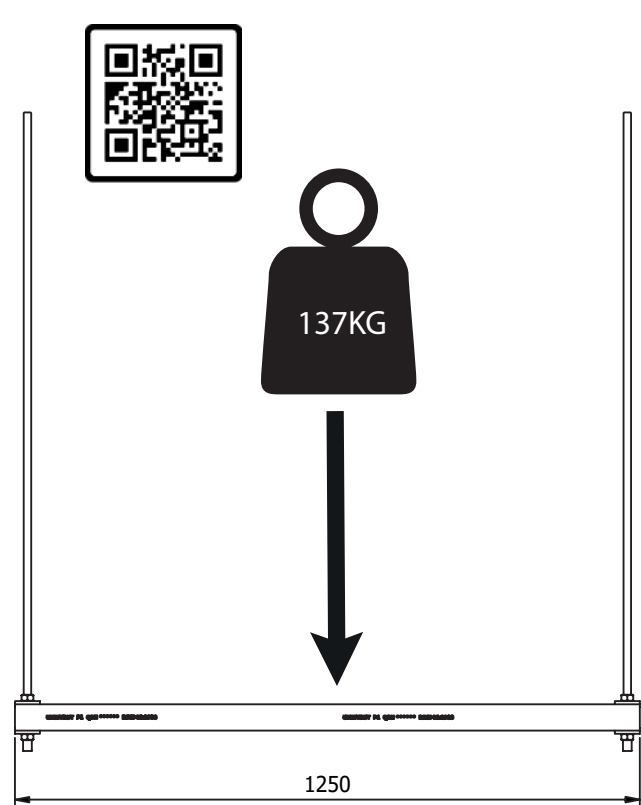
P1000T Trapeze/1250mm

Load transfers at max UDL capacity
161kg

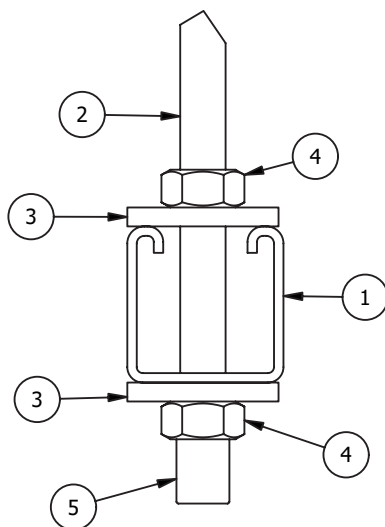


Span	KG	KN
1250mm	327	3.20
Deflection	6.54mm	

161kg



Span	KG	KN
1250mm	137	1.34
Deflection	3.2mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

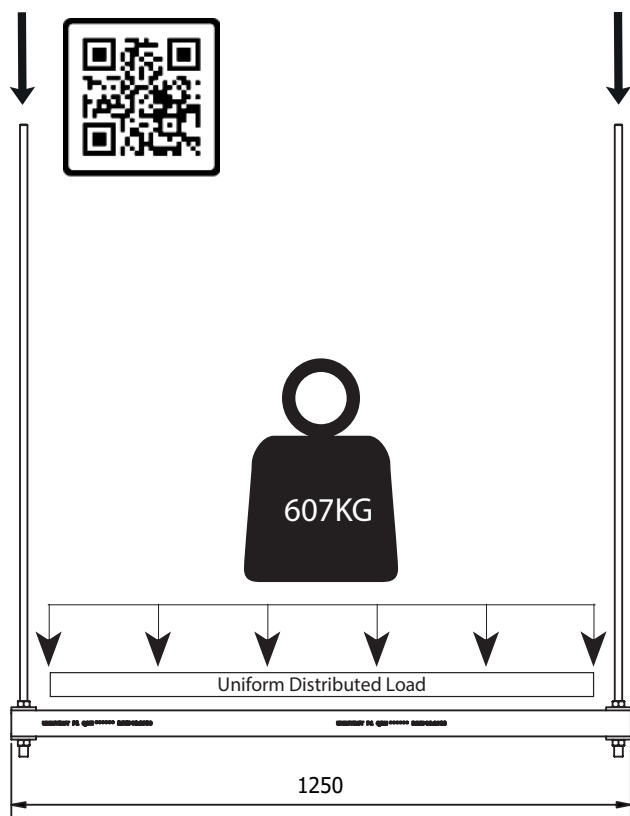
Item	Part Number	Description
1	P1000TPG X 1250	Unistrut Channels P1000T Slotted
2	M12X*LENGTH*ZP	ZP M12 Threaded Rod
3	P1020HG	Unistrut Flat Fitting P1020
4	9348M12	M12 Hex Nut
5	SCM12100	Threaded Rod End Cap

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5500T Trapeze

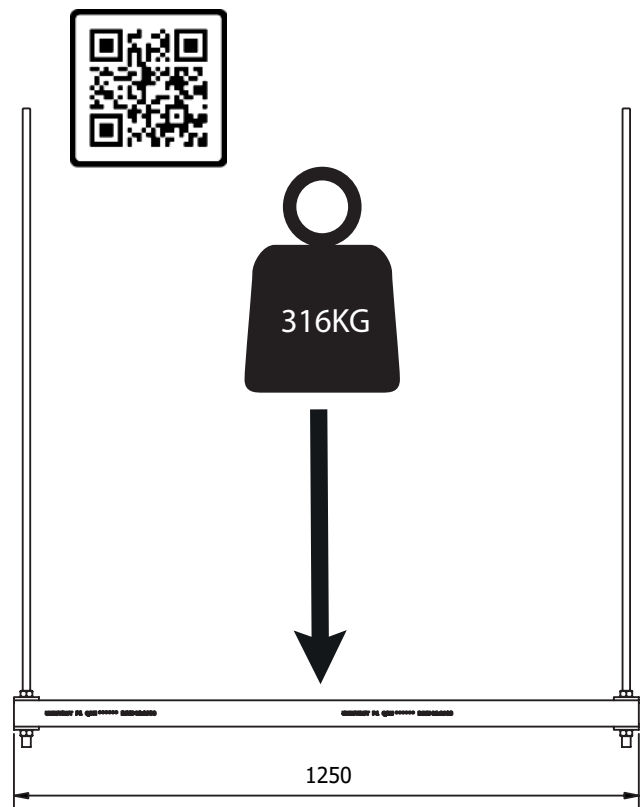
P5500T Trapeze/1250mm

Load transfers at max UDL capacity
289kg

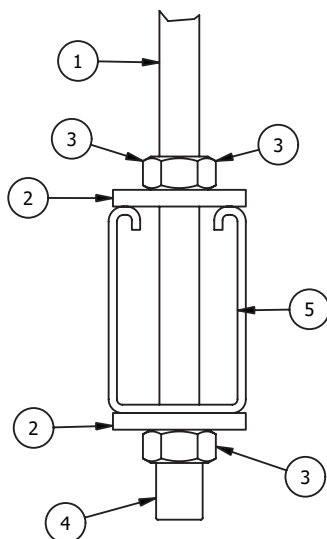


Span	KG	KN
1250mm	607	5.95
Deflection	4.18mm	

289kg



Span	KG	KN
1250mm	316	3.09
Deflection	2.6mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

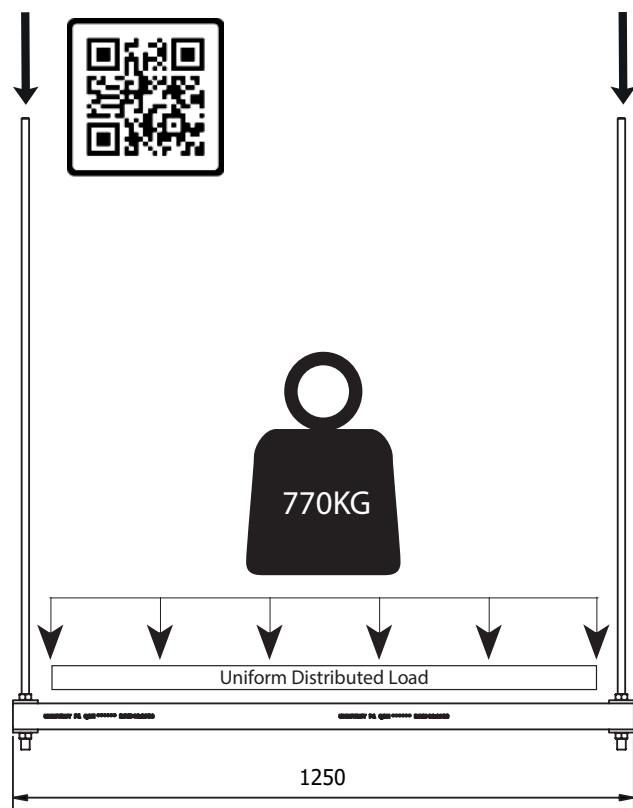
Parts List		
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5500TPGX1250	Unistrut Channels P5500T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5000T Trapeze

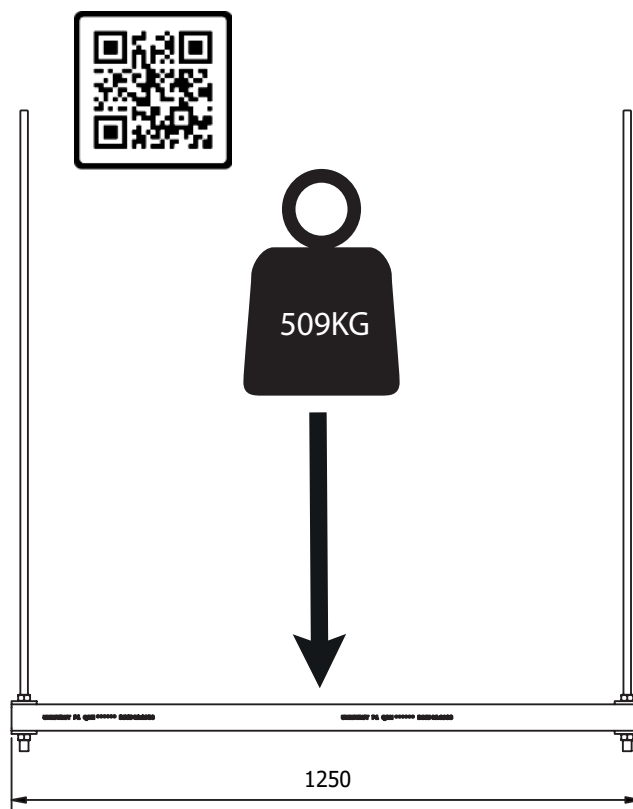
P5000T Trapeze/1250mm

Load transfers at max UDL capacity
513kg

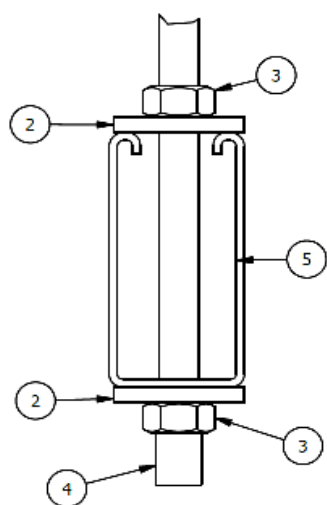


Span	KG	KN
1250mm	770	7.55
Deflection	2.48mm	

513kg



Span	KG	KN
1250mm	509	4.99
Deflection	1.9mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

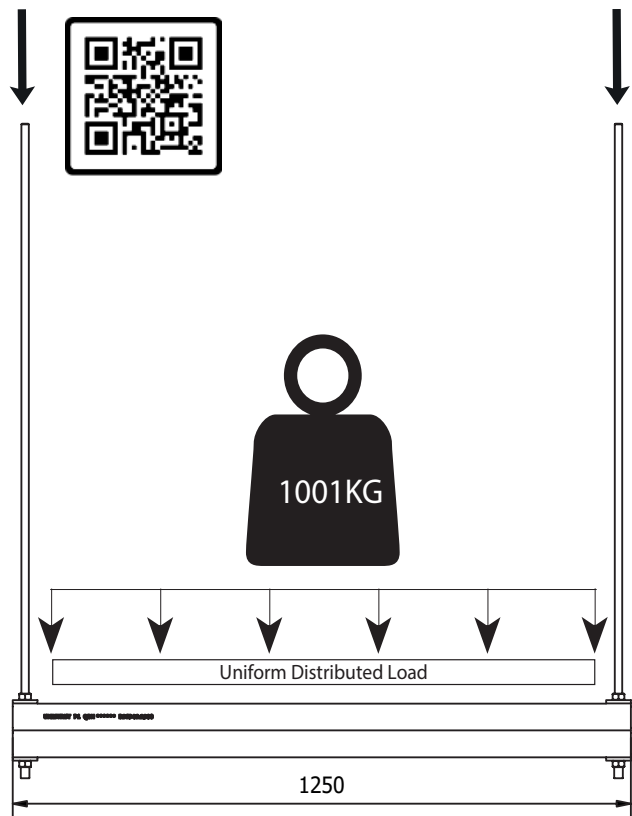
Parts List		
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5000TPGX1250	Unistrut Channels P5000T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P1001T Trapeze

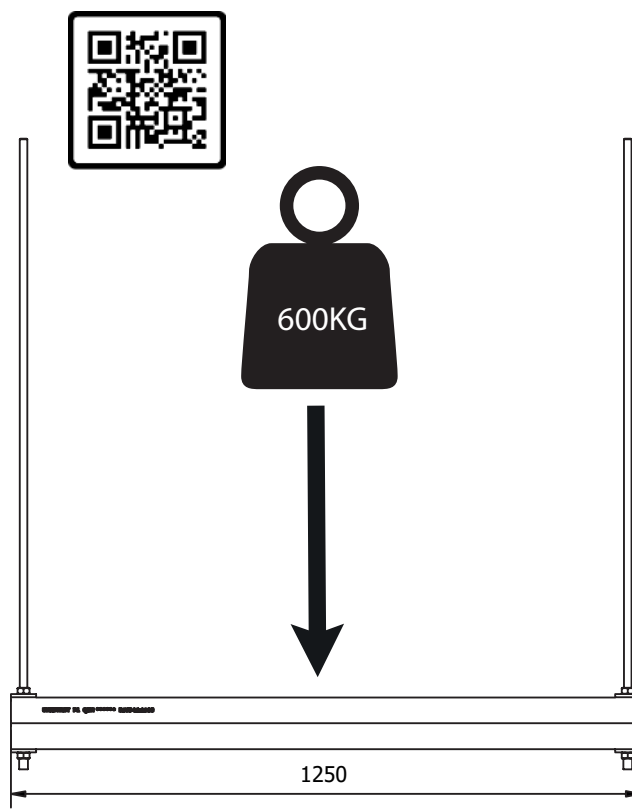
P1001T Trapeze/1250mm

Load transfers at max UDL capacity
482kg

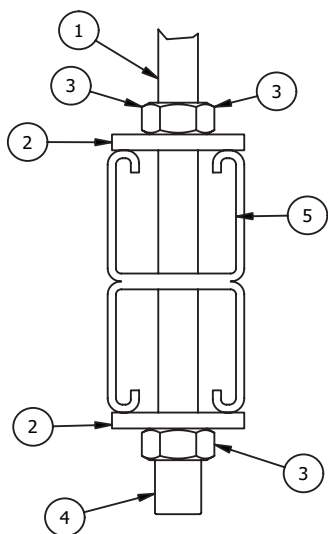


Span	KG	KN
1250mm	1001	9.81
Deflection	3.36mm	

482kg



Span	KG	KN
1250mm	600	5.88
Deflection	2.4mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List		
Item	Part Number	Description
1	M12*LENGTH* ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P1001TPGX1250	Unistrut Channels P1001T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.



1500mm

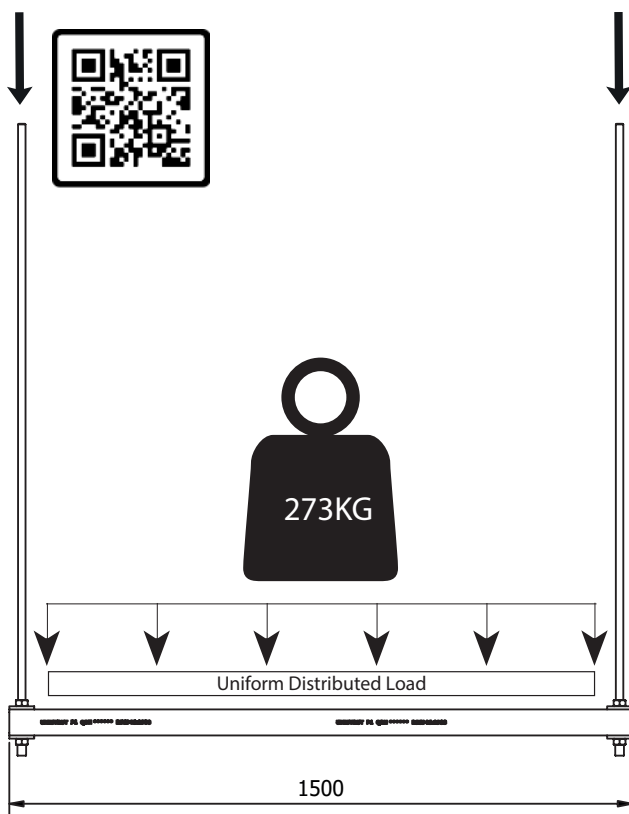
Trapeze



P1000T Trapeze

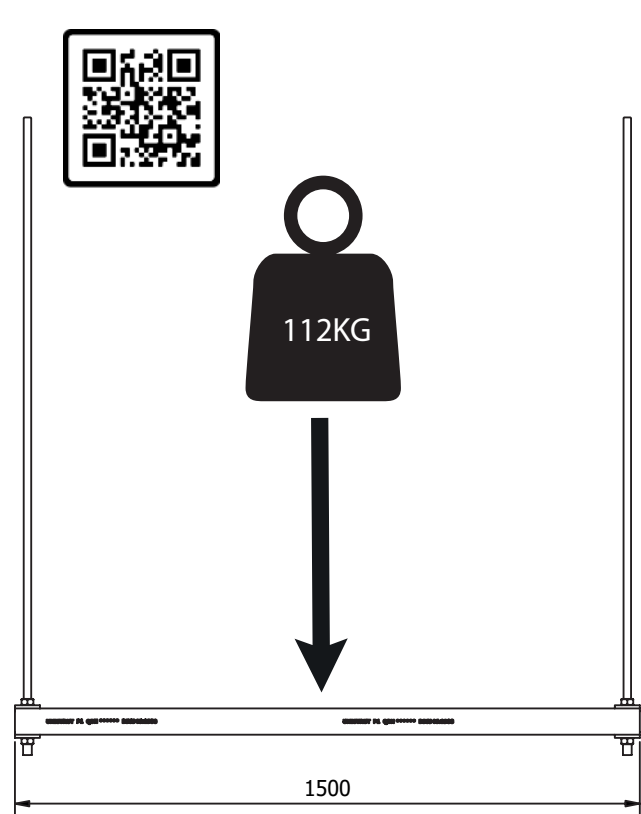
P1000T Trapeze/1500mm

Load transfers at max UDL capacity
132kg

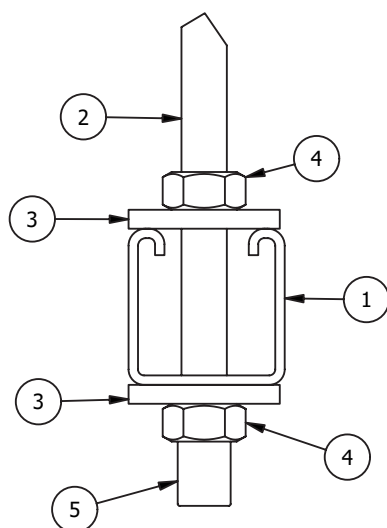


Span	KG	KN
1500mm	273	2.67
Deflection	9.41mm	

132kg



Span	KG	KN
1500mm	112	1.09
Deflection	4.6mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

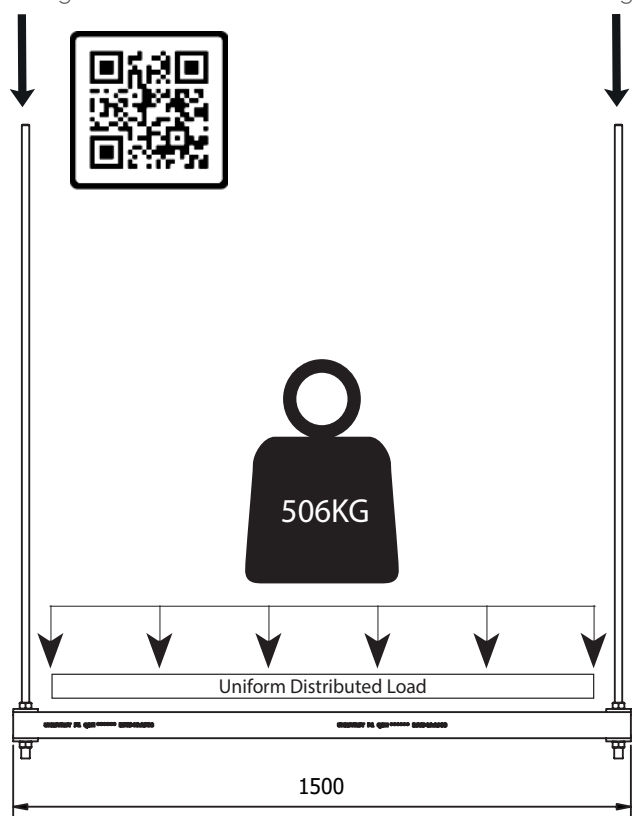
Item	Part Number	Description
1	P1000TPG X 1500	Unistrut Channels P1000T Slotted
2	M12X*LENGTH*ZP	ZP M12 Threaded Rod
3	P1020HG	Unistrut Flat Fitting P1020
4	9348M12	M12 Hex Nut
5	SCM12100	Threaded Rod End Cap

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5500T Trapeze

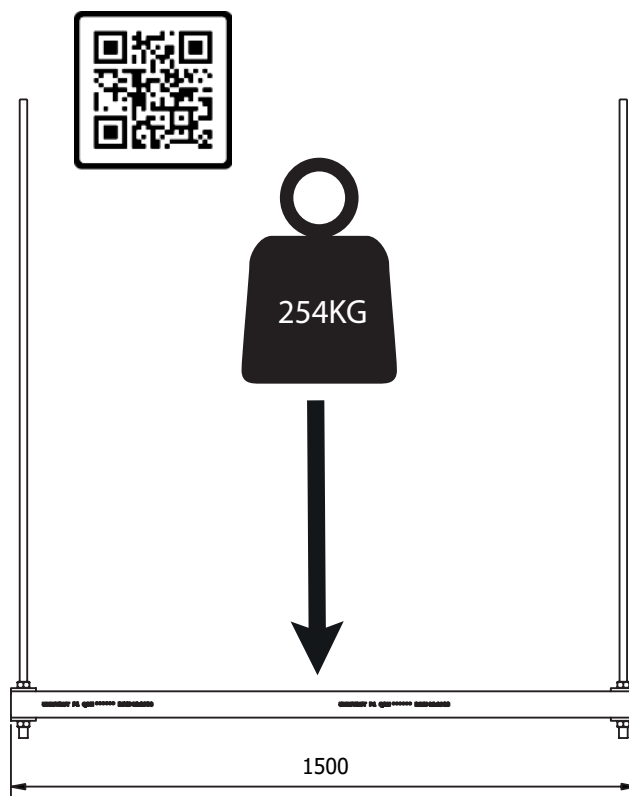
P5500T Trapeze/1500mm

Load transfers at max UDL capacity
255kg

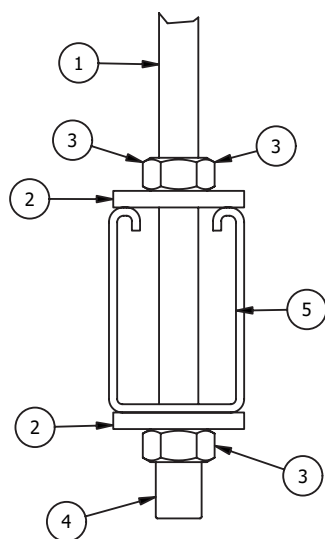


Span	KG	KN
1500mm	506	4.96
Deflection	6.02mm	

255kg



Span	KG	KN
1500mm	254	2.49
Deflection	4.4mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

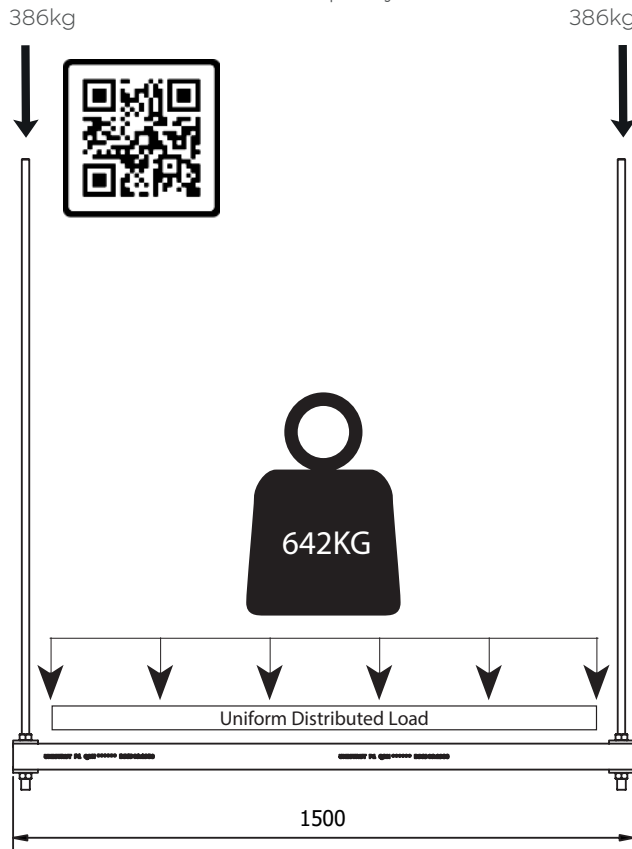
Parts List		
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5500TPGX1500	Unistrut Channels P5500T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5000T Trapeze

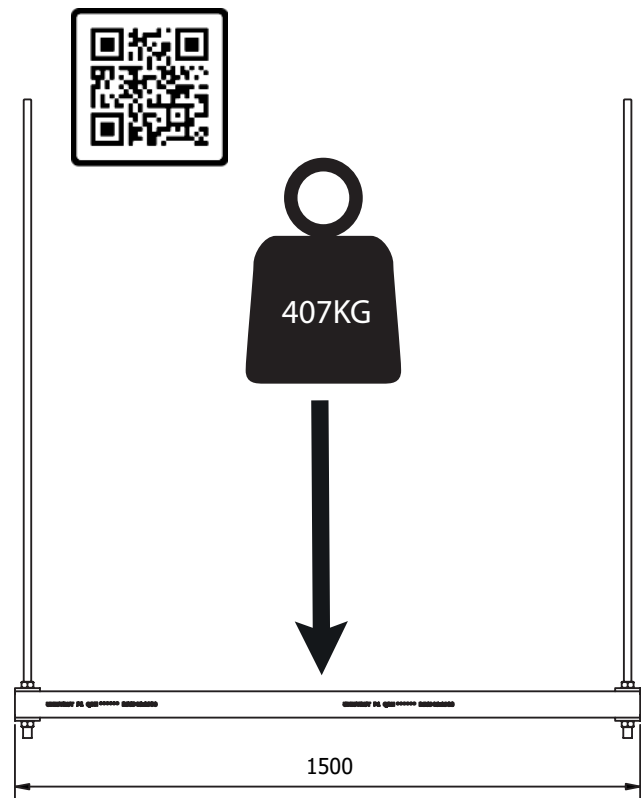
P5000T Trapeze/1500mm

Load transfers at max UDL capacity
386kg

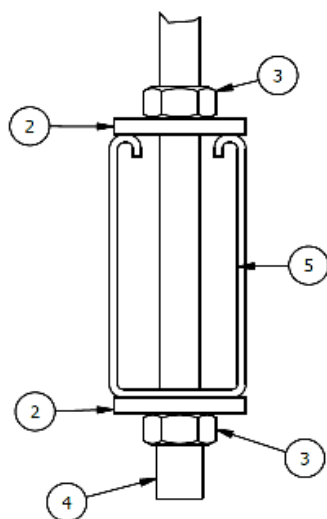


Span	KG	KN
1500mm	642	6.29
Deflection	3.58mm	

386kg



Span	KG	KN
1500mm	407	3.99
Deflection	2.7mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

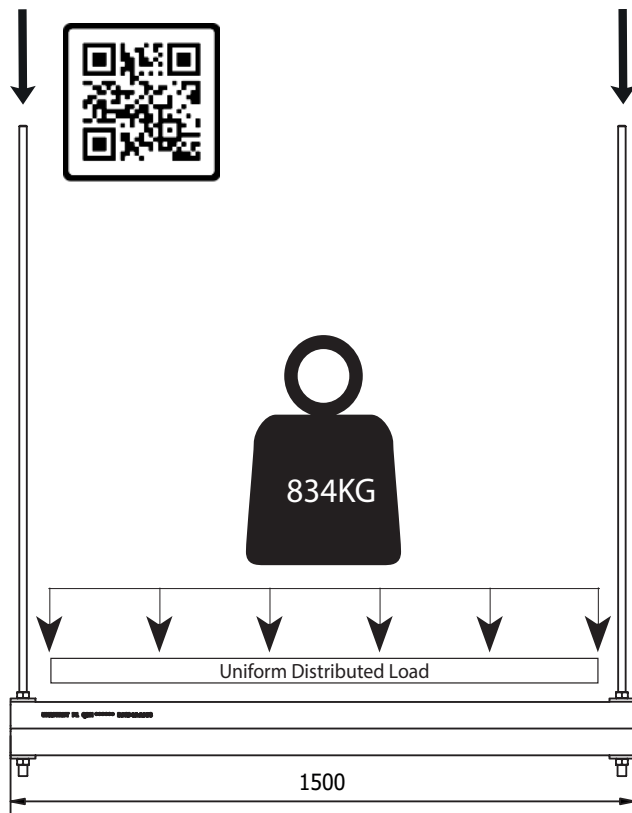
Parts List		
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5000TPGX1500	Unistrut Channels P5000T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P1001T Trapeze

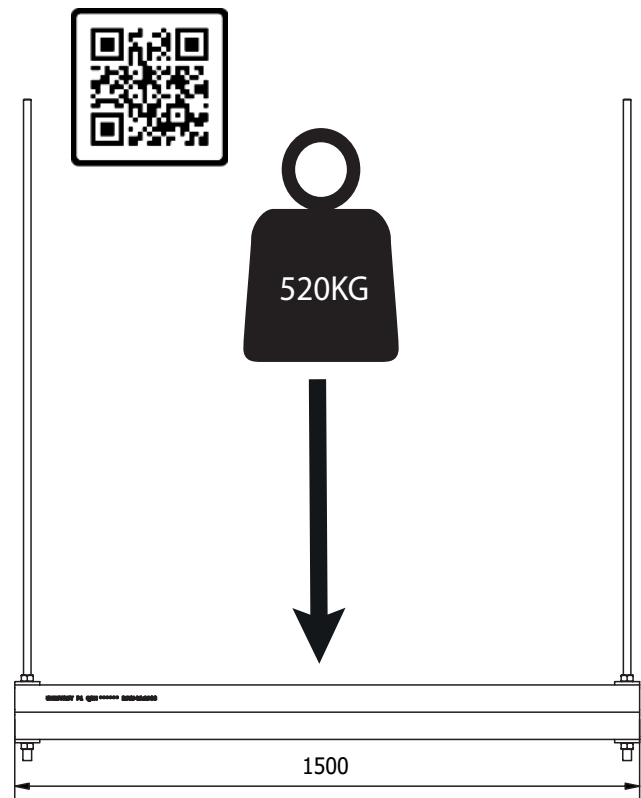
P1001T Trapeze/1500mm

Load transfers at max UDL capacity
387kg

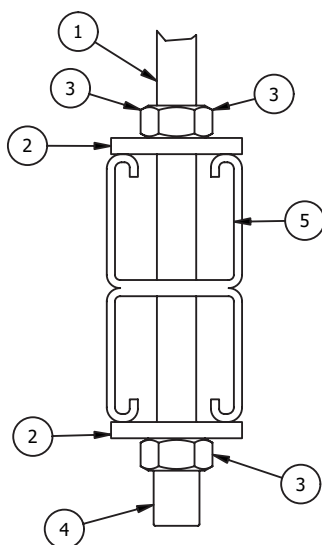


Span	KG	KN
1500mm	834	8.17
Deflection	4.84mm	

387kg



Span	KG	KN
1500mm	520	5.099
Deflection	2.4mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List		
Item	Part Number	Description
1	M12*LENGTH* ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P1001TPGX1500	Unistrut Channels P1001T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.



1750mm

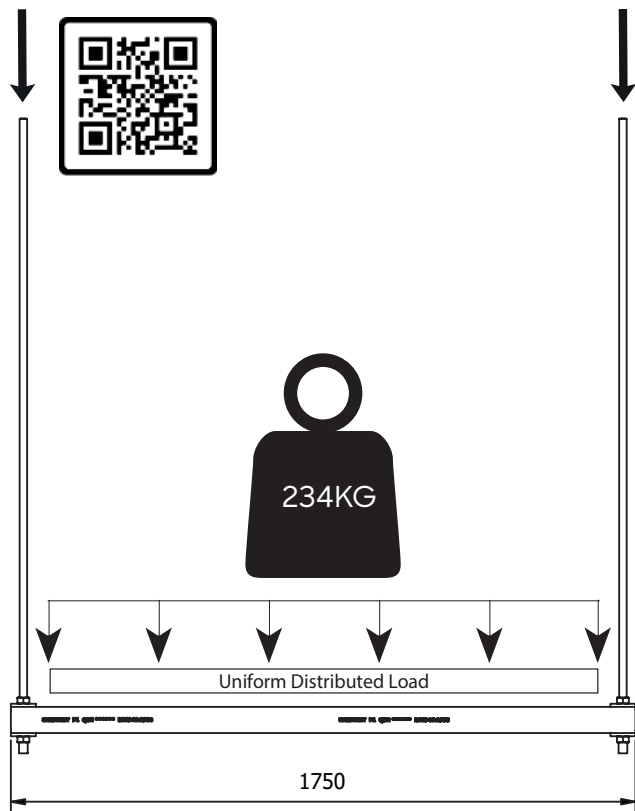
Trapeze



P1000T Trapeze

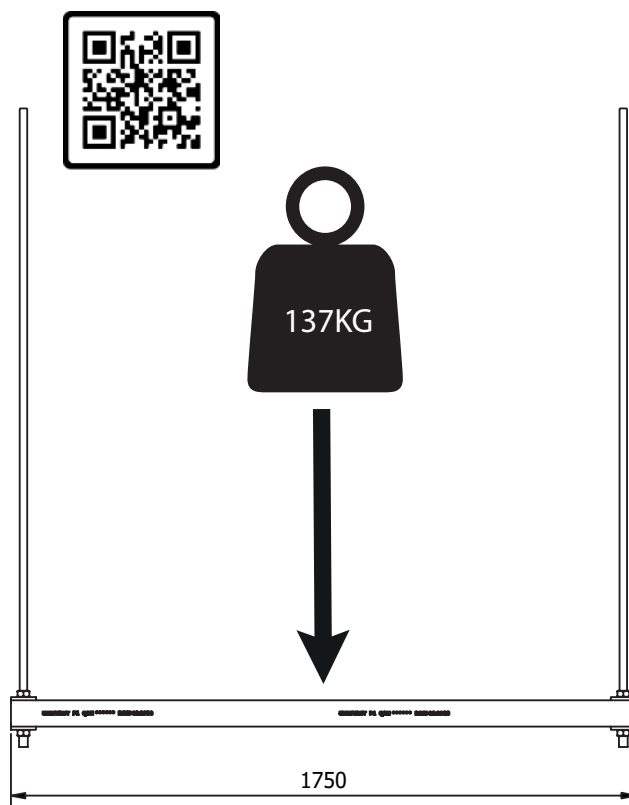
P1000T Trapeze/1750mm

Load transfers at max UDL capacity
109kg

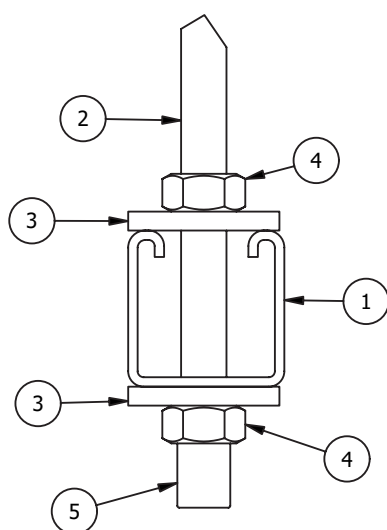


Span	KG	KN
1750mm	234	2.29
Deflection	12.81mm	

109kg



Span	KG	KN
1750mm	137	1.34
Deflection	6.4mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

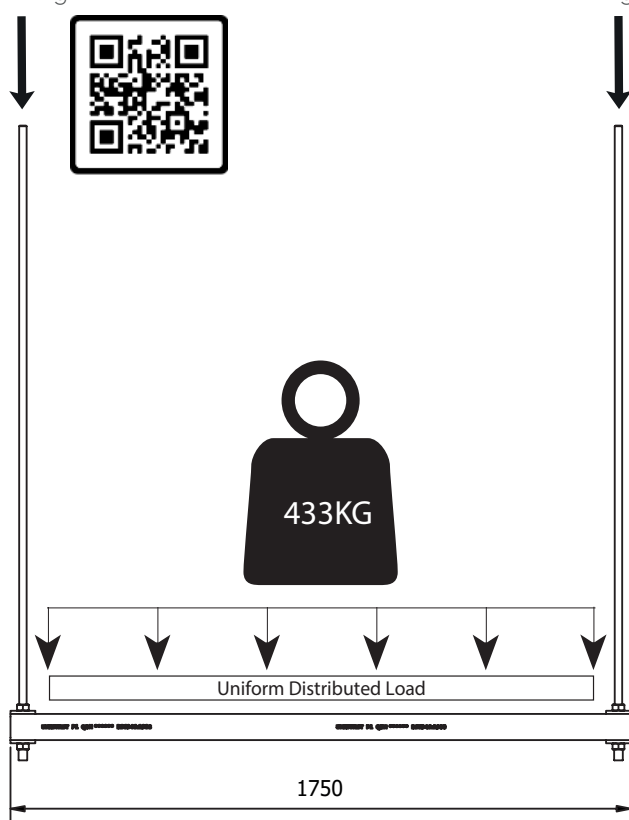
Item	Part Number	Description
1	P1000TPG X 1750	Unistrut Channels P1000T Slotted
2	M12X*LENGTH*ZP	ZP M12 Threaded Rod
3	P1020HG	Unistrut Flat Fitting P1020
4	9348M12	M12 Hex Nut
5	SCM12100	Threaded Rod End Cap

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5500T Trapeze

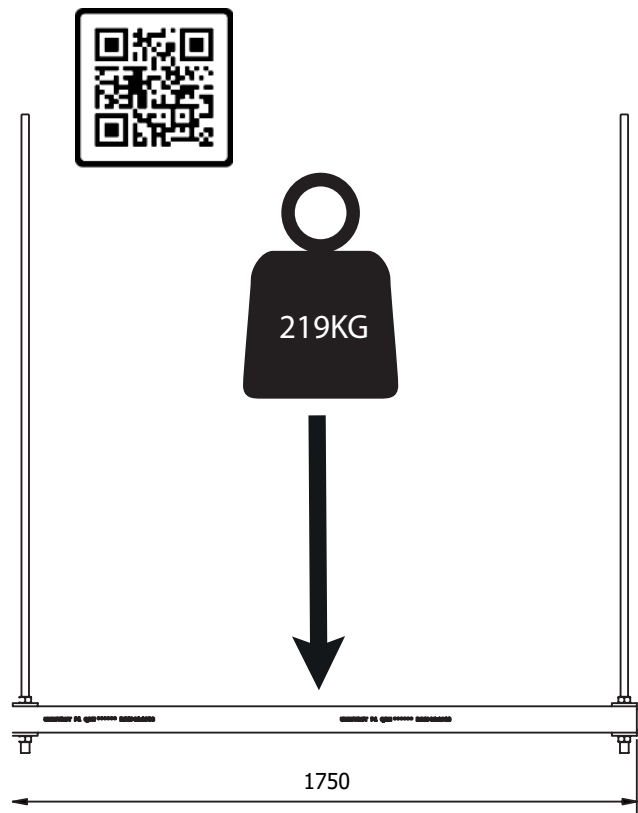
P5500T Trapeze/1750mm

Load transfers at max UDL capacity
217kg

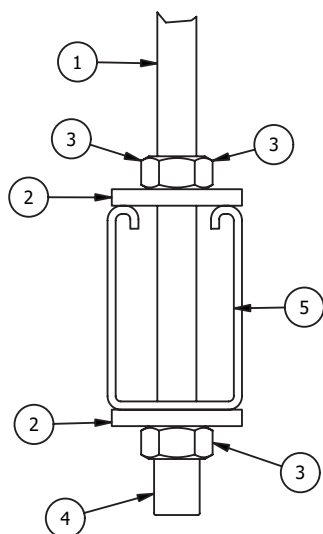


Span	KG	KN
1750mm	433	4.24
Deflection	8.19mm	

217kg



Span	KG	KN
1750mm	219	2.14
Deflection	4.9mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

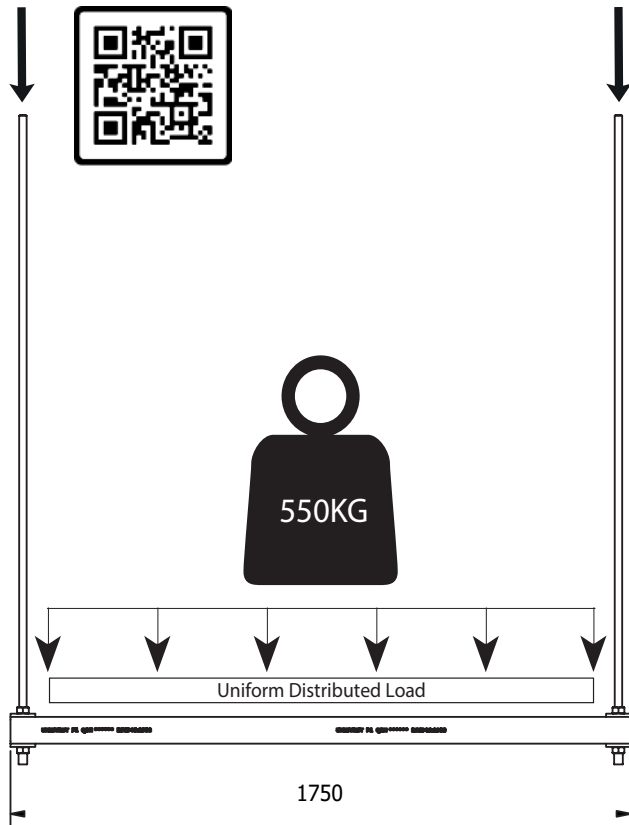
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5500TPGX1750	Unistrut Channels P5500T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P5000T Trapeze

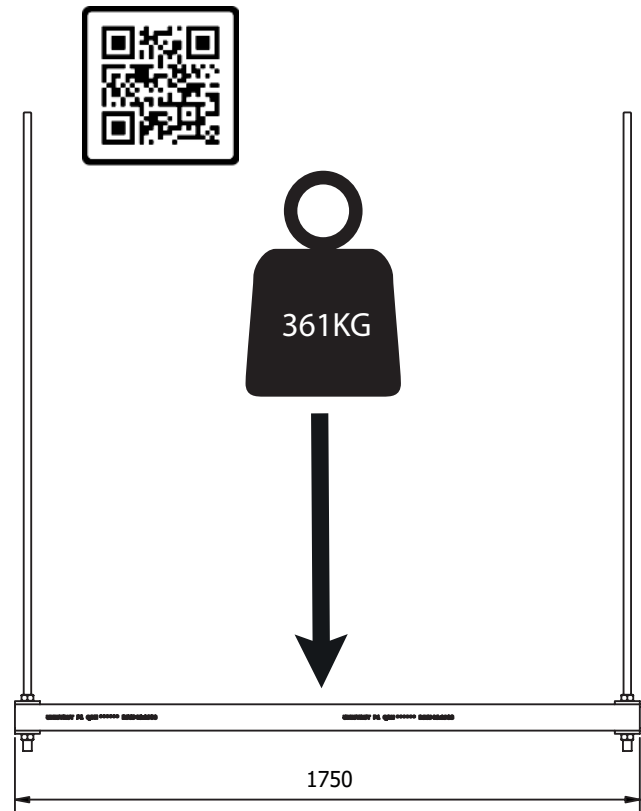
P5000T Trapeze/1750mm

Load transfers at max UDL capacity
361kg

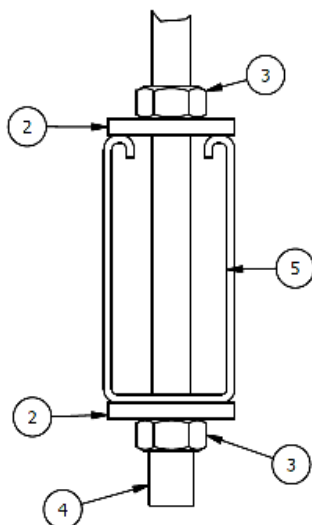


Span	KG	KN
1500mm	550	5.39
Deflection	4.86mm	

351kg



Span	KG	KN
1500mm	361	3.54
Deflection	3.8mm	



Threaded Rod

Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List

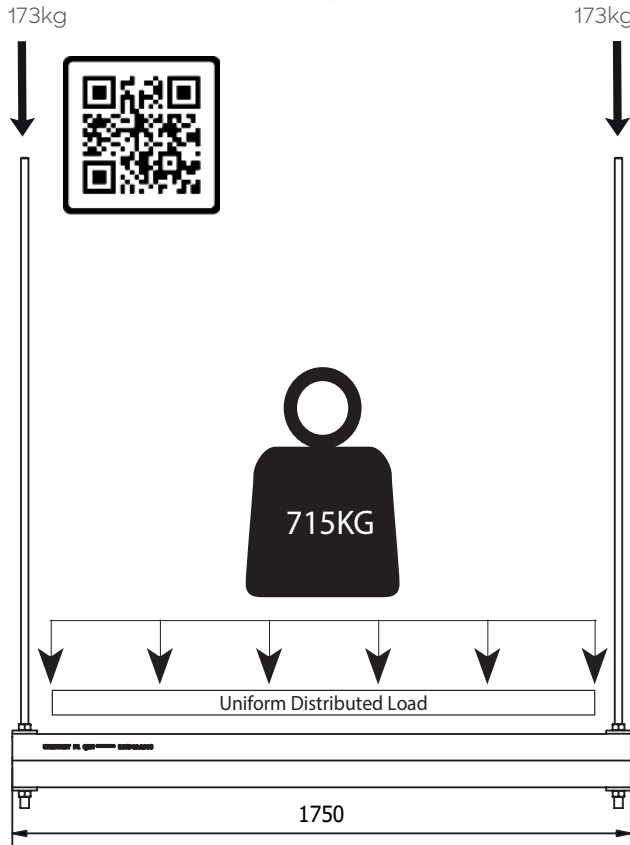
Item	Part Number	Description
1	M12X*LENGTH*ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9348M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P5000TPGX1750	Unistrut Channels P5000T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.

P1001T Trapeze

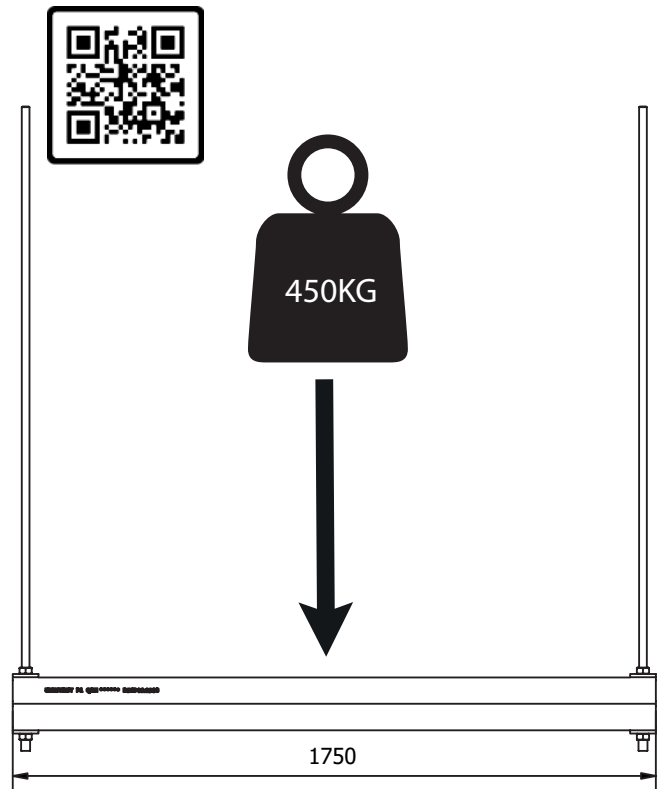
P1001T Trapeze/1750mm

Load transfers at max UDL capacity
173kg

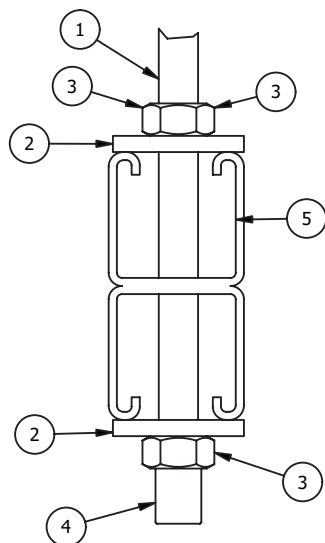


Span	KG	KN
1500mm	715	7.01
Deflection	5.59mm	

173kg



Span	KG	KN
1500mm	450	4.41
Deflection	4.9mm	



Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030

Parts List		
Item	Part Number	Description
1	M12*LENGTH* ZP	ZP M12 Threaded Rod
2	P1020HG	Unistrut Flat Fitting P1020
3	9343M12	M12 Hex Nut
4	SCM12100	Threaded Rod End Cap
5	P1001TPGX1750	Unistrut Channels P1001T Slotted

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.



2250mm

Trapeze

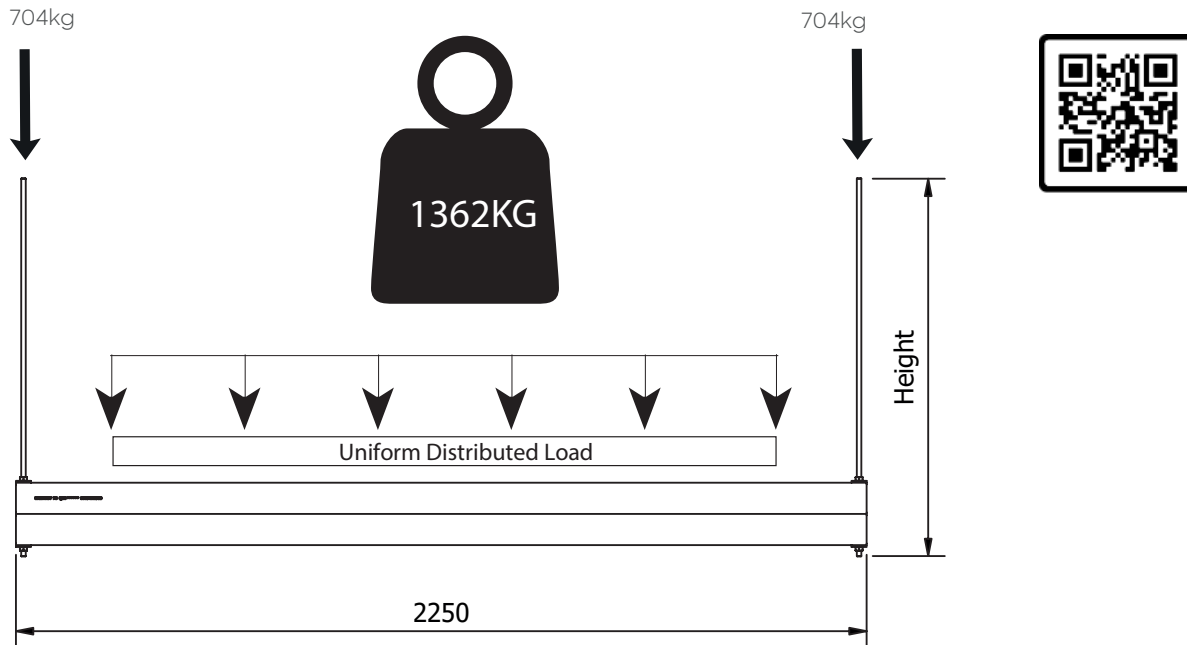


P5001T Trapeze

P5001T Trapeze/2250mm

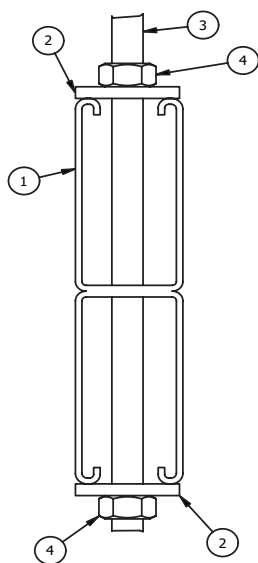
Load transfers at max UDL capacity

704kg



Span	KG	KN
2250mm	550	13.62
Deflection	4.05mm	

Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030



Parts List		
Item	Part Number	Description
1	P5001THG2250	P5001 Channel
2	P1020HG	Unistrut Flat Fitting P1020
3	M12XHeight	M12 Threaded Rod
4	9343M12	M12 Hex Nut

Loads calculated and interpreted by others for specific application and services.
 Design calculation is based on 1/200 deflection and factored loads.
 Point load is demonstrated at the centre.
 Deviation from the centre would require a specific application calculation.



2500mm

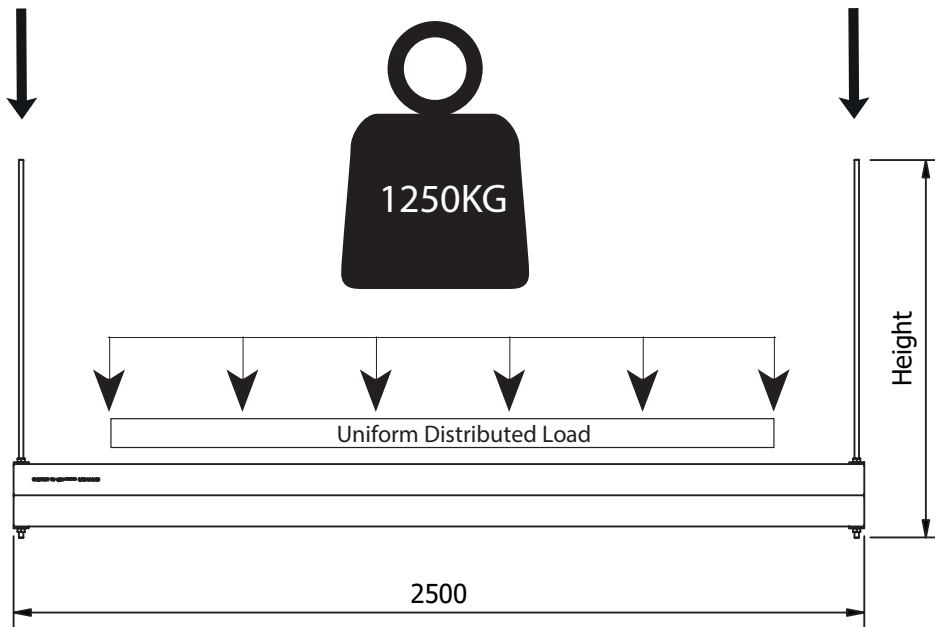
Trapeze



P5001T Trapeze

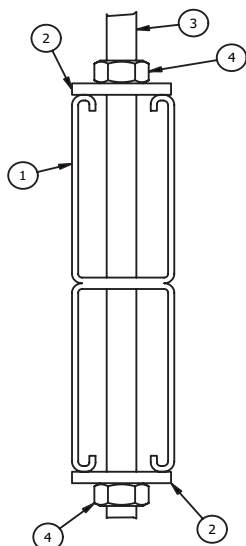
P5001T Trapeze/2500mm

Load transfers at max UDL capacity
636kg



Span	KG	KN
2500mm	1250	12.263
Deflection	5mm	

Threaded Rod	
Size	Safe Working Load (kgs)
M6	407
M8	448
M10	709
M12	1030



Parts List		
Item	Part Number	Description
1	P5001THG2500	P5001
2	P1020HG	Unistrut Flat Fitting P1020
3	M12xHeight	M12 Threaded Rod
4	9343M12	M12 Hex Nut

Loads calculated and interpreted by others for specific application and services.
Design calculation is based on 1/200 deflection and factored loads.
Point load is demonstrated at the centre.
Deviation from the centre would require a specific application calculation.



Service Load Data

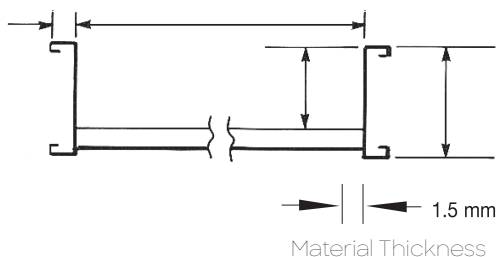
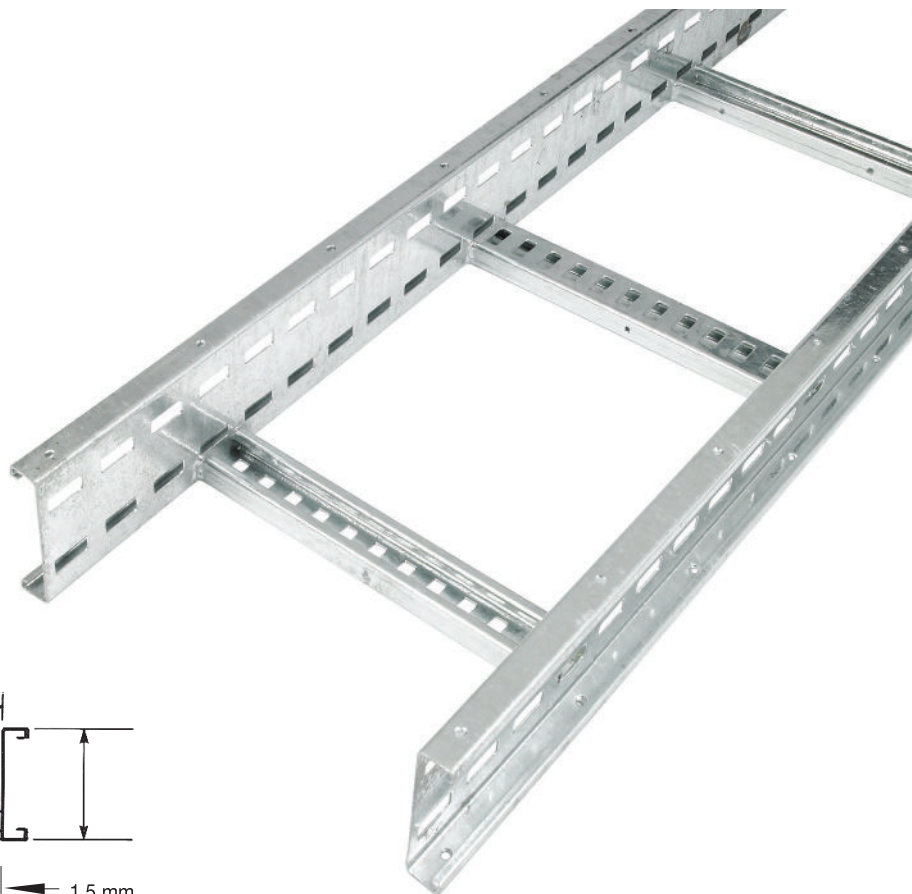
Cable Ladder



U10 - Medium Duty

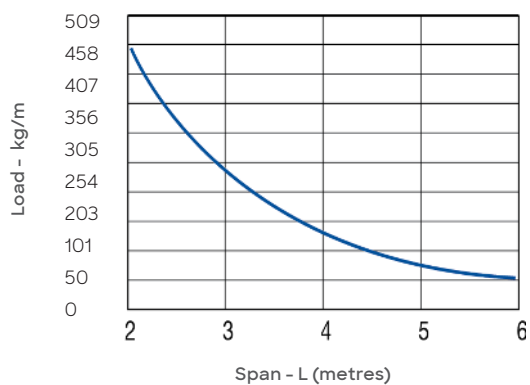
Medium Duty Cable Ladder

L3 and L6 Cable Ladder



Size (W)	Weight KG Per Metre	Cross Sectional area CM2
100	3.87	75
150	4.04	113
200	4.21	150
300	4.54	225
400	4.87	300
450	5.04	338
500	5.21	375
600	5.54	450
750	6.67	563
800	6.87	600
900	7.29	650
1000	7.71	750

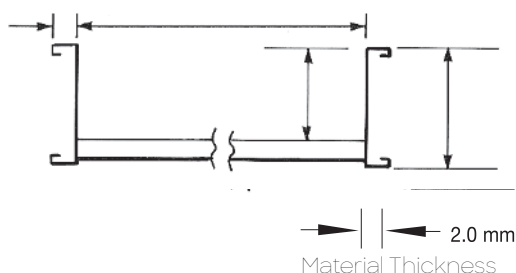
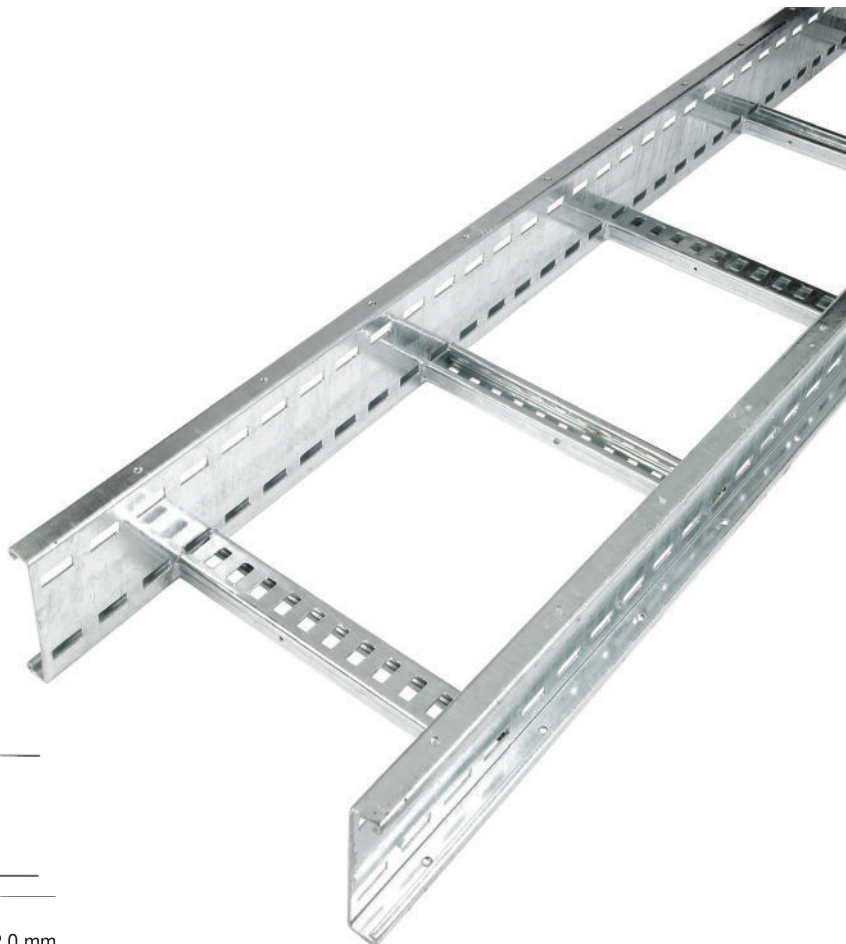
Atkore Unistrut Ladder - Type U10



U12 - Heavy Duty

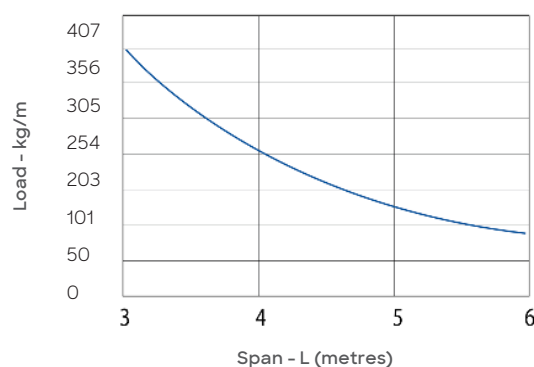
Heavy Duty Cable Ladder

L3 and L6 Cable Ladder



Size (W)	Weight KG Per Metre	Cross Sectional area CM2
100	5.51	100
150	5.75	150
200	5.91	200
300	6.25	300
400	6.58	400
450	6.75	450
500	6.91	500
600	7.25	600
750	8.37	750
800	8.58	800
900	9	900
1000	9.41	1000

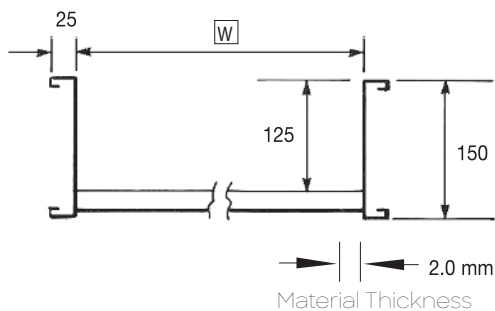
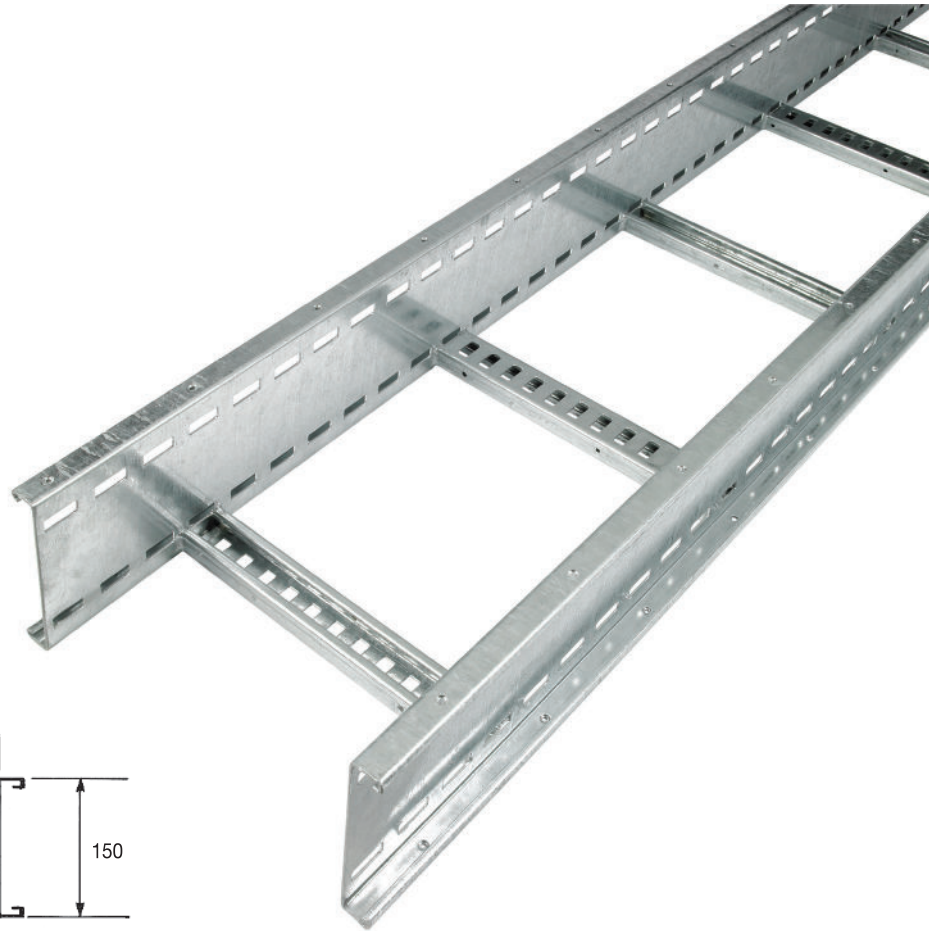
Atkore Unistrut Ladder - Type U12



U15 - Extra Heavy Duty

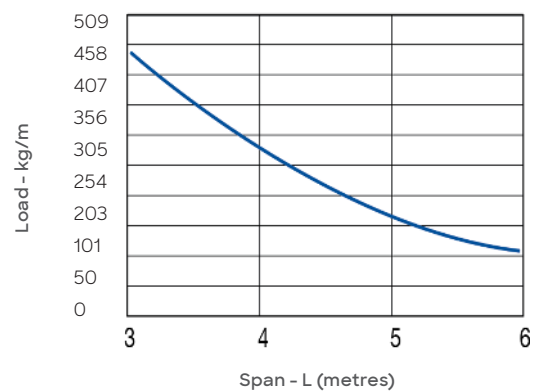
Extra Heavy Duty Cable Ladder

L3 and L6 Cable Ladder



Size (W)	Weight KG Per Metre	Cross Sectional area CM2
100	6.29	125
150	6.46	188
200	6.63	250
300	6.96	375
400	7.3	500
450	7.46	563
500	7.63	625
600	7.96	750
750	9.09	938
800	9.3	1000
900	9.71	1125
1000	10.13	12500

Atkore Unistrut Ladder - Type U15





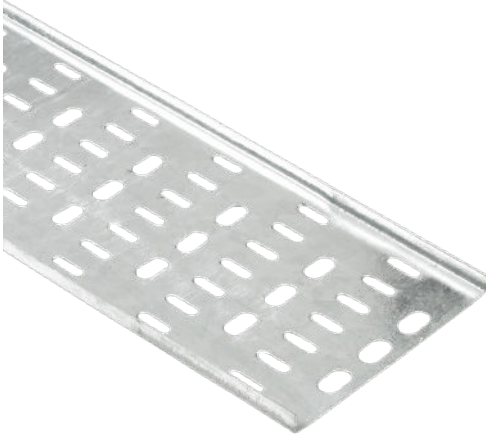
Service Load Data

Cable Tray

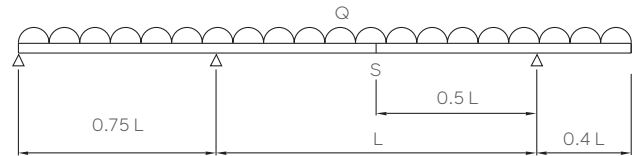


Light Duty

Atkore Unistrut Light Duty Cable Tray



Loading Data



Load test according to CEI/IEC 61537:2001

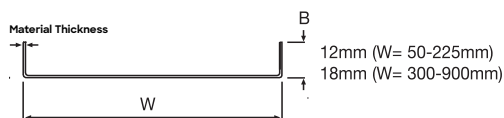
Q = UDL (uniformly distributed load)

Safety Factor = 1.7

L = intermediate span

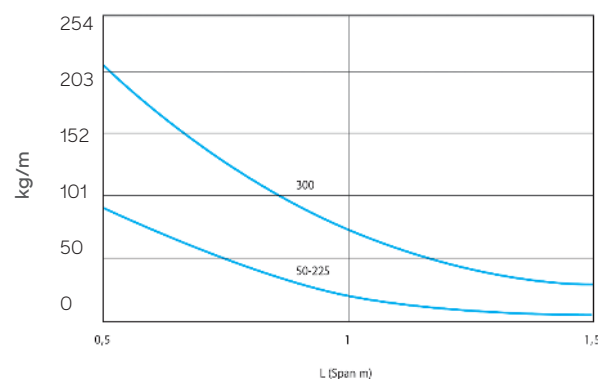
F = deflection = 1/100 of the intermediate span (max.)

S = splice location



Size (W)	Weight KG Per Metre	Cross Sectional area CM2
50	0.41	5.4
75	0.56	8.1
100	0.71	10.9
150	0.96	16.6
225	1.31	24.9
300	2.66	49.9
450	3.83	75.1
600	8.08	95.3
750	10	119.3
900	11.88	143.3

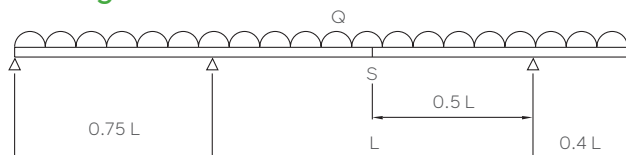
Light Duty Cable Tray



Medium Duty

Atkore Unistrut Medium Duty Cable Tray

Loading Data



Load test according to CEI/IEC 61537:2001

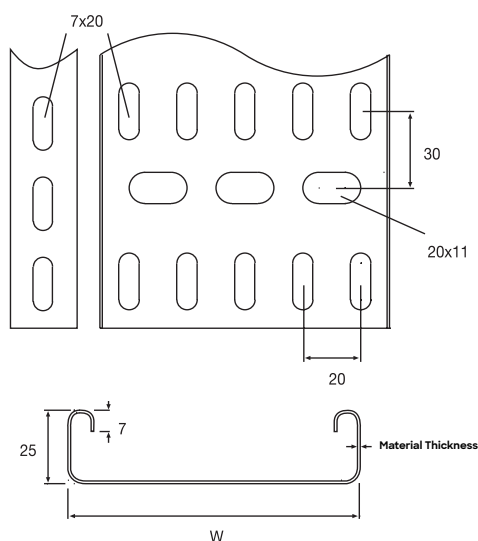
Q = UDL (uniformly distributed load)

Safety Factor = 1.7

L = intermediate span

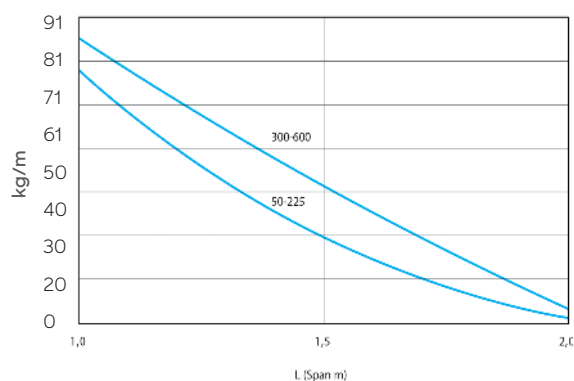
F = deflection = 1/100 of the intermediate span (max.)

S = splice location



Size (W)	Weight KG Per Metre	Cross Sectional area CM2
50	0.68	11.4
75	0.83	17.4
100	0.98	23.5
150	1.24	35.6
225	1.66	53.7
300	3.05	70.4
450	4.28	0
600	5.5	141.8
750	12.71	171.1
900	13.58	205.6

Medium Duty Cable Tray

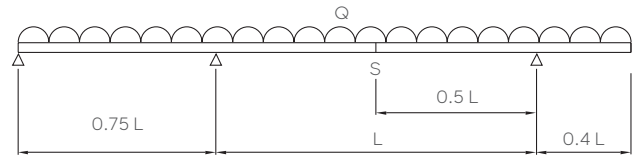


Heavy Duty

Atkore Unistrut Heavy Duty Cable Tray



Loading Data



Load test according to CEI/IEC 61537:2001

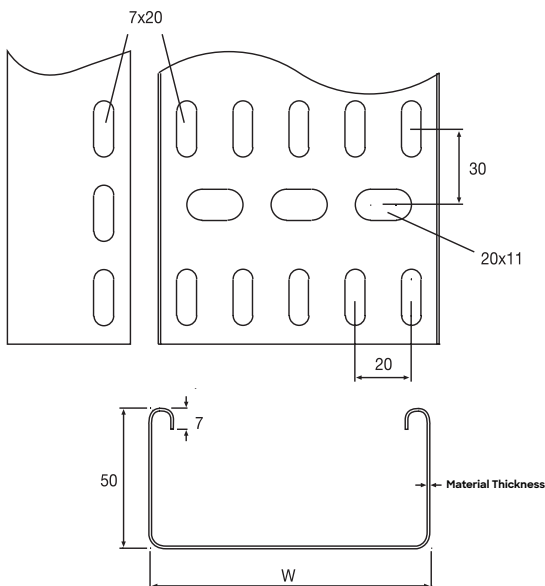
Q = UDL (uniformly distributed load)

Safety Factor = 1.7

L = intermediate span

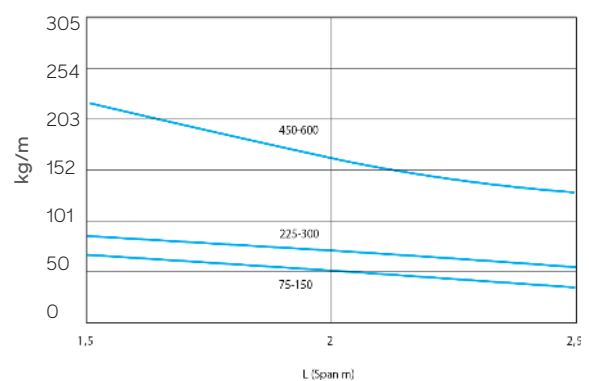
F = deflection = 1/100 of the intermediate span (max.)

S = splice location



Size (W)	Weight KG Per Metre	Cross Sectional area CM2
75	1.16	35.8
100	1.31	48.1
150	1.67	72.7
225	2.91	108.2
300	3.53	144.8
450	7.76	213.6
600	9.79	285.6
750	13.52	356.6
900	15.88	429.6

Heavy Duty Cable Tray





Service Load Data

Steel Wire Cable Tray



MC30 Range

Specification for MC30 Steel Wire Cable Tray

Product Code

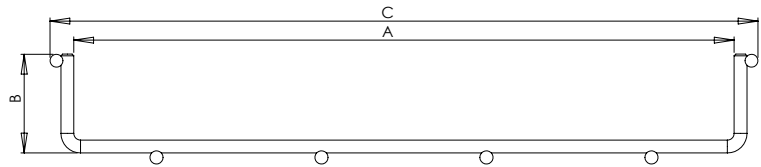
MC30 Range

Product Description

30mm deep Steel Wire Cable Tray
50 x 100 mm mesh configuration

Product Specification:

Manufactured: Machine welded from steel wire rod



Cable Capacities

MC30		
CABLE TRAY	TOTAL FILL AREA (mm ²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm ²)
MC3050	1400	700
MC30100	2800	1400
MC30150	4200	2100
MC30200	5600	2800
MC30300	8400	4200

PART CODE	'A' DIMENSION	'B' DIMENSION	'C' DIMENSION
MC3050	50	30	64
MC30100	100	30	114
MC30150	150	30	164
MC30200	200	30	214
MC30300	300	30	316
MC30400	400	30	416
MC30450	450	30	466
MC30500	500	30	516



Size	Weight KG Per Metre
50	0.4
100	0.54
150	0.69
200	0.84
300	1.44

MC55 Range

Specification for MC55 Steel Wire Cable Tray

Product Code

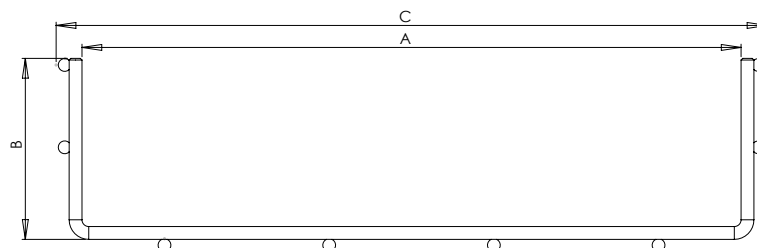
MC55 Range

Product Description

55mm deep Steel Wire Cable Tray
50 x 100 mm mesh configuration

Product Specification:

Manufactured: Machine welded from steel wire rod



Cable Capacities

MC55		
CABLE TRAY	TOTAL FILL AREA (mm ²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm ²)
MC5550	2600	1300
MC55100	5200	2600
MC55150	7800	3900
MC55200	10400	5200
MC55300	15600	7800
MC55400	20800	10400
MC55450	23400	11700
MC55500	26000	13000
MC55600	31200	15600

PART CODE	'A' DIMENSION	'B' DIMENSION	'C' DIMENSION
MC5550	50	55	64
MC55100	100	55	114
MC55150	150	55	164
MC55200	200	55	214
MC55300	300	55	316
MC55400	400	55	416
MC55450	450	55	468
MC55500	500	55	518
MC55600	600	55	618



Size	Weight KG Per Metre
50	0.64
100	0.79
150	0.94
200	1.07
300	1.74

MC106 Range

Specification for MC106 Steel Wire Cable Tray

Product Code

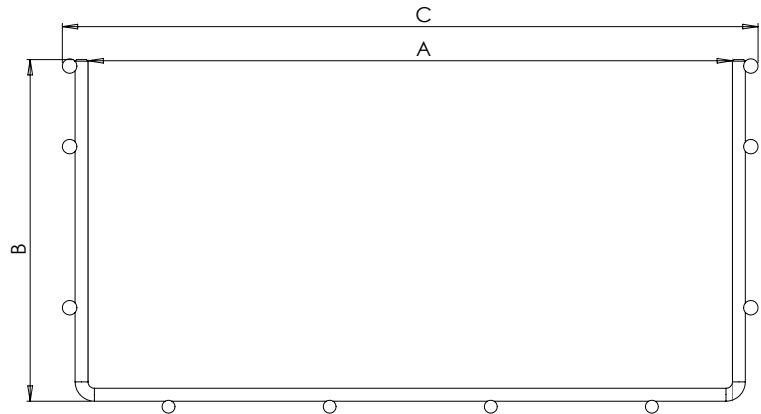
MC106 Range

Product Description

106mm deep Steel Wire Cable Tray
50 x 100 mm mesh configuration

Product Specification:

Manufactured: Machine welded from
steel wire rod



Cable Capacities

MC106		
CABLE TRAY	TOTAL FILL AREA (mm ²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm ²)
MC106100	10303	5152
MC106150	15452	7726
MC106200	20600	10300
MC106300	30903	15452
MC106400	41200	20600
MC106450	46348	23174
MC106500	51503	25752
MC106600	61818	30909



PART CODE	'A' DIMENSION	'B' DIMENSION	'C' DIMENSION
MC106100	100	106	114
MC106150	150	106	164
MC106200	200	106	214
MC106300	300	106	316
MC106400	400	106	418
MC106450	450	106	468
MC106500	500	106	518
MC106600	600	106	618

Size	Weight KG Per Metre
100	1.4
150	1.6
200	1.74
300	2.6
400	3
450	3.24
500	3.5
600	3.47

Pipe Dimensions

Steel Pipe

Suitable for screwing

Steel pipe suitable for screwing				Weight kg/m			L (max.)*
D			S	Empty	Filled	Insulated	
	(“)	(DN)					
10.2	1/8	6	2.00	0.41	0.44	0.59	1.25
13.5	1/4	8	2.35	0.65	0.71	0.88	1.50
17.2	3/8	10	2.35	0.85	0.97	1.17	2.25
21.3	1/2	15	2.65	1.22	1.42	1.63	2.75
26.9	3/4	20	2.65	1.58	1.95	2.20	3.00
33.7	1	25	3.25	2.44	3.02	3.51	3.50
42.4	1 1/4	32	3.25	3.14	4.15	4.86	3.75
48.3	1 1/2	40	3.25	3.61	4.98	5.94	4.25
60.3	2	50	3.65	5.10	7.31	8.83	4.75
76.1	2 1/2	65	3.65	6.51	10.23	12.77	5.50
88.9	3	80	4.05	8.47	13.59	17.08	6.00
114.3	4	100	4.50	12.10	20.80	26.31	6.00
139.7	5	125	4.85	16.20	29.47	35.45	6.00
165.1	6	150	4.85	19.20	38.16	44.83	6.00

Norm:
DIN EN 10255 - 11/2004

Material:
Steel 33-2, according to DIN 17100

Insulation:
Mineral wool (density = 80 kg/m³)

Steel Pipe

Steel pipe (Seamless)

Steel pipe suitable for screwing				Weight kg/m			L (max.)*
D			S	Empty	Filled	Insulated	
	(")	(DN)					
10.2	1/8	6	1.6	0.34	0.38	0.53	1.25
13.5	1/4	8	1.8	0.52	0.60	0.77	1.50
17.2	3/8	10	1.8	0.68	0.83	1.02	2.25
21.3	1/2	15	2.0	0.96	1.19	1.40	2.75
26.9	3/4	20	2.3	1.40	1.79	2.22	3.00
33.7	1	25	2.6	1.99	2.63	3.12	3.50
42.4	1 1/4	32	2.6	2.55	3.64	4.39	3.75
48.3	1 1/2	40	2.6	2.93	4.39	5.39	4.25
60.3	2	50	2.9	4.11	6.44	8.03	4.75
76.1	2 1/2	65	2.9	5.24	9.12	11.7	5.50
88.9	3	80	3.2	6.76	12.10	15.72	6.00
114.3	4	100	3.6	9.83	18.83	24.25	6.00
139.7	5	125	4.0	13.40	27.02	33.05	6.00
168.3	6	150	4.5	18.20	38.27	43.66	6.00
219.1	8	200	6.3	33.10	67.75	72.95	6.00
273.0	10	250	6.3	41.40	96.11	1104.15	6.00
323.9	12	300	7.1	55.50	131.57	141.56	6.00
355.6	14	350	8.0	68.60	160.95	170.74	6.00
406.4	16	400	8.8	86.30	207.05	217.91	6.00
457.0	18	450	10.0	110.00	262.67	274.44	6.00
508.0	20	500	11.0	135.00	323.79	335.87	6.00
610.0	24	600	12.5	184.00	457.26	471.16	6.00

Norm:
DIN EN 10220 - 03/2003

Material:
Steel 37

Insulation:
Mineral wool (density = 80 kg/m³)

PVC Pipe

PVC pipe

PVC Pipe	Weight kg/m	
D	Empty	Filled
40	0.33	1.37
50	0.42	2.11
63	0.56	3.31
75	0.78	4.69
90	1.13	6.75
110	1.64	10.07
125	2.13	12.99
140	2.65	16.29
160	3.44	21.24
180	4.37	26.90
200	5.37	33.17
225	6.76	41.97
250	8.31	51.81
280	10.40	64.95
315	13.20	82.26

Norm:
DIN EN 8062 - 11/1988

Series:
3

SDR:
34,3

Material:
PVC-U

PVC Pipe

Suitable for screwing

PVC Pipe suitable for screwing				Weight kg/m			L (max.)*
D			S	Empty	Filled	Insulated	
	(“)	(DN)					
25	-	-	1.5	0.17	0.55	-	0.65
32	-	-	1.8	0.26	0.90	-	0.70
40	-	-	1.9	0.35	1.38	-	0.90
50	-	-	2.4	0.55	2.16	-	1.10
63	-	-	3.0	0.85	3.40	-	1.20
75	-	-	3.6	1.22	4.83	-	1.35
90	-	-	4.3	1.75	6.95	-	1.50
110	-	-	5.3	2.61	10.37	-	1.70
125	-	-	6.0	3.34	13.36	-	1.80
140	-	-	6.7	4.18	16.76	-	1.95
160	-	-	7.7	5.47	21.88	-	2.10
180	-	-	8.6	6.88	27.69	-	2.20
200	-	-	9.6	8.51	34.17	-	2.30
225	-	-	10.8	10.80	43.28	-	2.40
250	-	-	11.9	13.20	53.37	-	2.50
280	-	-	13.4	16.60	66.93	-	2.80
315	-	-	15.0	20.90	84.66	-	3.00

Norm:
DIN EN 8062 - 11/1988

Series:
4

SDR:
21

Material:
PVC-U

Welded Steel Pipe

Suitable for screwing

Welded Pipe suitable for screwing				Weight kg/m			L (max.)*
D			S	Empty	Filled	Insulated	
	(")	(DN)					
10.2	1/8	6	1.6	0.34	0.38	0.53	1.25
13.5	1/4	8	1.8	0.52	0.60	0.77	1.50
17.2	3/8	10	1.8	0.68	0.83	1.02	2.25
21.3	1/2	15	2.0	0.95	1.19	1.40	2.75
26.9	3/4	20	2.0	1.23	1.64	2.07	3.00
33.7	1	25	2.0	1.56	2.25	2.74	3.50
42.4	1 1/4	32	2.3	2.27	3.39	4.17	3.75
48.3	1 1/2	40	2.3	2.61	4.11	5.13	4.25
60.3	2	50	2.3	3.29	5.73	7.38	4.75
76.1	2 1/2	65	2.6	4.71	8.66	11.29	5.50
88.9	3	80	2.9	6.15	11.57	15.17	6.00
114.3	4	100	3.2	8.77	17.91	23.31	6.00
139.7	5	125	3.6	12.10	25.88	31.92	6.00
168.3	6	150	4.0	16.20	36.57	43.16	6.00
219.1	8	200	4.5	23.80	58.78	66.55	6.00
273.0	10	250	5.0	33.00	88.13	96.81	6.00
323.9	12	300	5.6	44.00	121.84	131.49	6.00
355.6	14	350	5.6	48.30	142.06	153.04	6.00
406.4	16	400	6.3	62.20	184.80	196.81	6.00
457.0	18	450	6.3	70.00	226.01	239.27	6.00
508.0	20	500	6.3	77.90	270.56	286.13	6.00

Norm:
DIN EN 10220 - 03/2003

Material:
Steel 37-2

Insulation:
Mineral wool (density = 80 kg/m³)

Cast Iron Pipe

Suitable for screwing

Cast Iron Pipe suitable for screwing				Weight kg/m			L (max.)*
D			S	Empty	Filled	Insulated	
		(DN)					
48	+2.0/-1.0	40	3.0	3.10	4.48	-	2.00
58		50	3.5	4.30	6.34	-	2.00
78		70	3.5	5.90	9.86	-	2.00
83		75	3.5	4.30	10.83	-	2.00
110		100	3.5	8.40	16.73	-	1.50
135	+2.0/-2.0	125	4.0	11.80	24.46	-	1.50
160		150	4.0	14.10	32.24	-	1.50
210		200	5.0	23.10	54.50	-	1.50
274	+2.5/-2.5	250	5.5	33.30	87.60	-	1.50
326		300	6.0	43.20	120.60	-	1.50
429	+2.0/-3.0	400	8.1	77.65	211.49	-	1.50
532	+2.0/-3.5	500	9.0	107.21	314.71	-	1.50
635	+2.0/-4.0	600	9.9	140.95	438.20	-	1.50

Norm:
DIN EN 19522 - 01/2000

Material:
Cast Iron according to ISO 185 (EN 587)

Copper Pipe

Suitable for screwing

Copper Pipe suitable for screwing				Weight kg/m			L (max.)*
D			S	Empty	Filled	Insulated	
	(")	(DN)					
10.0	-	-	1.0	0.25	0.30	0.45	1.00
12.0	-	10	1.0	0.31	0.39	0.55	1.25
15.0	-	-	1.0	0.39	0.52	0.70	1.25
18.0	-	15	1.0	0.48	0.68	0.87	1.50
22.0	-	20	1.0	0.59	0.90	1.11	2.00
28.0	-	25	1.5	1.11	1.60	2.05	2.25
35.0	-	32	1.5	1.41	2.21	2.70	2.75
42.0	-	40	1.5	1.70	2.89	3.69	3.00
54.0	-	50	2.0	2.91	4.87	6.19	3.50
64.0	-	-	2.0	3.47	6.29	8.19	4.00
76.1	-	65	2.0	4.14	8.22	10.93	4.25
88.9	-	80	2.0	4.86	10.52	14.26	4.75
108.0	-	-	2.5	7.37	15.70	20.98	5.00
133.0	-	-	3.0	10.90	23.57	29.50	5.00
159.0	-	-	3.0	13.09	31.46	38.06	5.00
219.0	-	-	3.0	18.12	53.73	61.87	5.00
267.0	-	-	3.0	22.10	75.60	-	5.00

Norm:
EN 1057-05/1996 (ex. DIN 1786)

Material:
Copper according to EN 1412

Insulation:
Mineral wool (density = 80kg/m3)

Health & Safety Statement

Quality, Occupational Health, Safety & Environmental Policy Statement

At Atkore, we consider Quality, Occupational Health and Safety and the Environment to be vital components that contribute towards the company's success. In line with our Core Values, we embrace quality, occupational health, safety and environment performance standards with the highest regard, and we drive continuous improvement utilising Atkore's Safety and Environment Management System and the Atkore Business System.

Quality, Occupational Health and Safety

Our goal is to ensure that employees, customers, contractors and visitors in our facilities go home safely at the end of each day. We empower everyone to retroactively identify and eliminate risks to promote an injury-free and incident-free workplace.

Environment

Our goal is to minimise our impact on and protect the environments in which we live and work. We seek to utilise sustainable business practices that are in the best interest of the environment and all stakeholders.

Our mission is to provide our customers with product that meets specifications detailed in the technical literature, by the agreed delivery date and at a price that provides value to our customers whilst enabling us to meet our stated business objectives.

Our management system, that as a minimum, meets the requirements of BS EN ISO 9001:2015, as well as our production processes will be continually reviewed for improvement opportunities that will allow us to achieve best-in-class performance in all areas of our business.

We are committed to creating a shared, company-wide culture where all levels of the organisation personally embrace our Quality, Occupational Health, Safety and Environmental Principles:

- We take personal responsibility for ourselves and others
- We believe that all injuries and occupational illnesses are preventable
- We value employee engagement in creating and adhering to safety processes and procedures
- We promote social and environmental stewardship throughout our supply chain
- We are committed to safeguarding climate and ecosystems through preventive practices, material efficiency and natural resources allocation
- We seek to protect people and communities in which our facilities are located by minimising waste and ensuring the safest handling, treatment and disposal
- We comply with all applicable laws and regulations and any other requirements to which the company subscribes

Atkore employees, customers, contractors and visitors are expected to adhere to our Safety and Environment policies, related practices and procedures.

Please demonstrate your commitment, both personally and collectively, by respecting our Safety and Environment Principles. Your efforts can make the difference in the success of Atkore.

Sustainability

Let's be green

We know that every efficiency counts. We also work hard to increase the fundamental sustainability of our steel systems in practice.

The combined effect is to help reduce the carbon footprint of our projects in comparison to alternative methods.

In recognition of our ongoing efforts, Atkore Unistrut & Marco has received the following certifications:

ISO 14001

ISO 14001 is an internationally agreed standard that sets out the requirements for an environmental management system. It helps organisations improve their environmental performance through more efficient use of resources and reduction of waste, gaining a competitive advantage and the trust of stakeholders.

ISO 45001

ISO 45001 Occupational Health and Safety Management System is designed to reduce the risks of work-related ill-health (and injury) and to provide safe and healthy work environments.



Industry Standards

Legislations

At Atkore Unistrut & Marco we pride ourselves on delivering solutions fully in line with the latest legislation, regulation and industry standards. So whatever you specify, you can be assured of the quality of product you have purchased.

CE MARKING

CE marking indicates that a product has been assessed by the manufacturer and deemed to meet EU safety, health and environmental protection requirements.

BS EN 61537:2007

Cable Management – Cable tray systems and cable ladder systems

BS 7671:2018

Requirements for Electrical Installations, IET wiring regulations.

BS EN 50174-2:2018

Information Technology – Cabling Installation. Installation planning and practices inside buildings

BS 6946:1988

Metal channel cable support systems for electrical installations

BS EN 50085-1:2005

Cable trunking systems and cable ducting systems for electrical installations

BS 6701:2016

Telecommunications equipment and telecommunications cabling. Specification for A1:2017 installation, operation and maintenance

BS EN 100625

Hot rolled products of structural steels

BS EN 10346

Pre Galvanised Steel

BS EN ISO 1461:2009

Hot dip galvanised coatings on fabricated iron and steel articles – Specification test methods

ISO 9001

ISO 9001 aims to provide a practical and workable Quality Management System for improving and monitoring all areas of your business.

ISO 14001

ISO 14001 is an internationally agreed standard that sets out the requirements for an environmental management system. It helps organisations improve their environmental performance through more efficient use of resources and reduction of waste, gaining a competitive advantage and the trust of stakeholders.

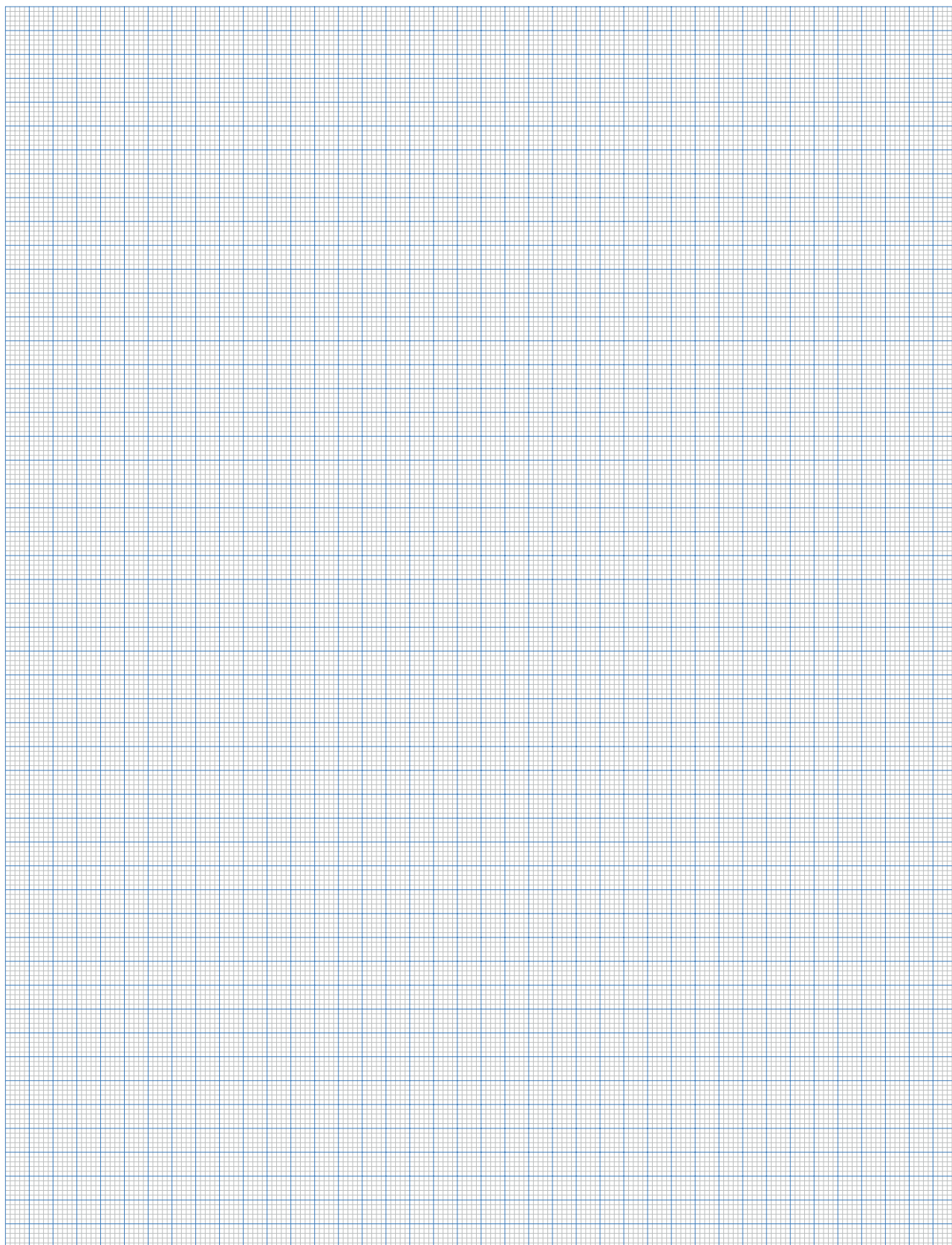
ISO 45001

ISO 45001 Occupational Health and Safety Management System is designed to reduce the risks of work-related ill-health (and injury) and to provide safe and healthy work environments.

UK CA

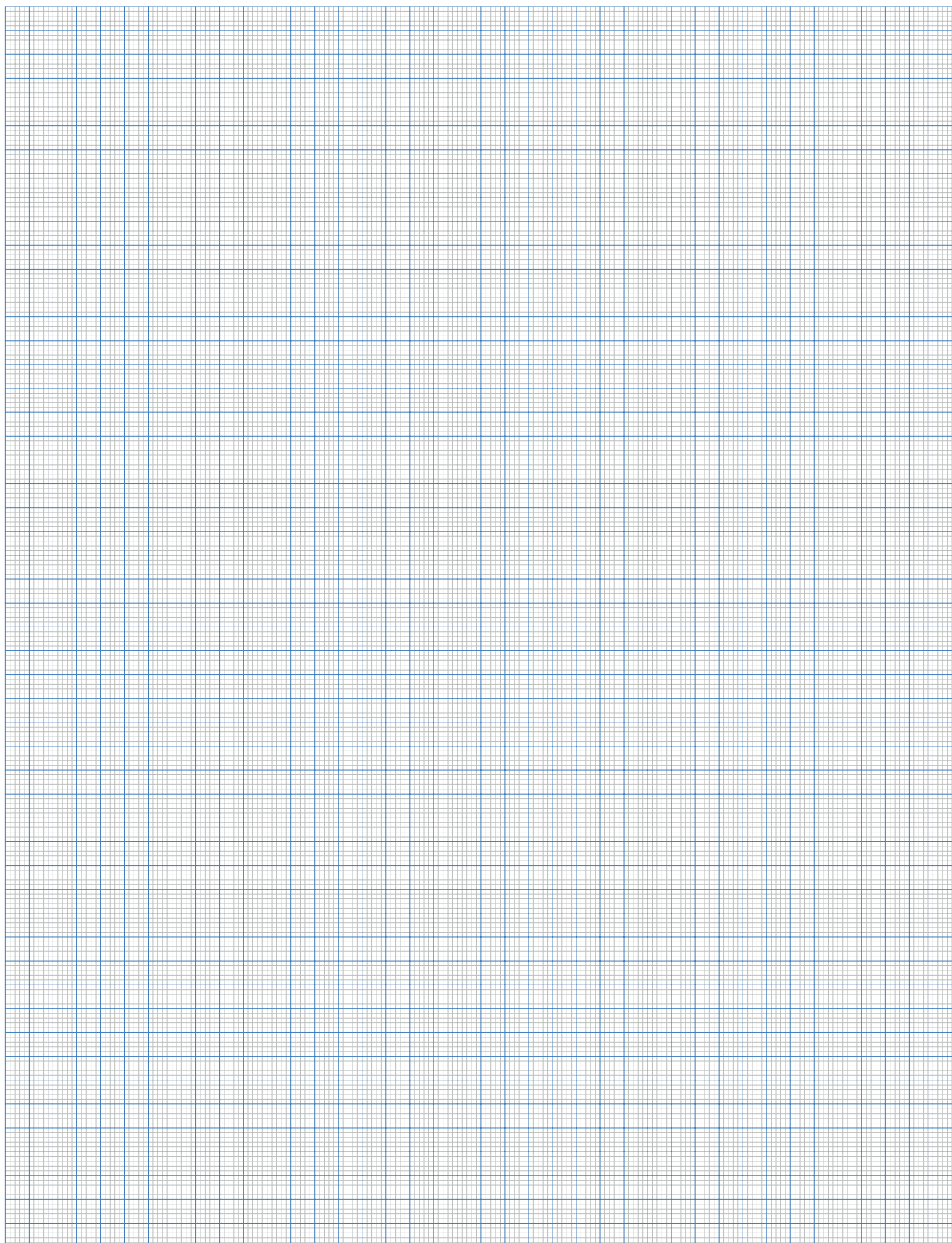
UK Conformity Assessed marking is a certification mark that indicates conformity with the applicable requirements for products sold within Great Britain.

Graph Paper



Notes

Graph Paper





Allied Tube & Conduit ▴ AFC Cable Systems ▴ Heritage Plastics ▴ Unistrut
Unistrut Construction ▴ Cope ▴ US Tray ▴ Calbrite ▴ Calbond ▴ Kaf-Tech
Power-Strut ▴ Calconduit ▴ Razor Ribbon ▴ Calpipe Security ▴ Vergokan ▴ Cii
Columbia-MBF ▴ Eastern Wire + Conduit ▴ ACS/Uni-Fab ▴ Sasco Strut ▴ Marco
FRE Composites ▴ Queen City Plastics ▴ Four Star Industries ▴ Flexicon

Atkore Unistrut & Marco
Delta Point,
Greets Green Road
West Bromwich
B70 9PL

PHONE/ +44 (0) 121 580 6300
FAX / +44 (0) 121 580 6370

atkore.com/marco
atkore.com/unistrut

