



# MW WIRE SYSTEM

**BU Installation**  
**Installation Technical Manual**  
**Typical Applications**  
**Product Line Applications**

Version 2.2

12.2021

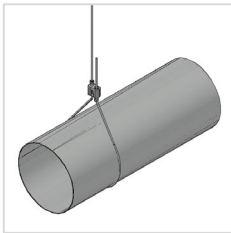

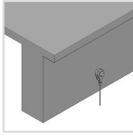
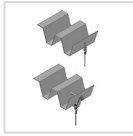
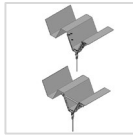
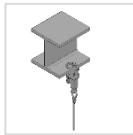
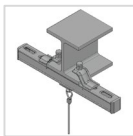
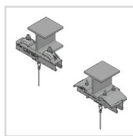
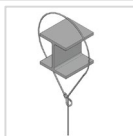


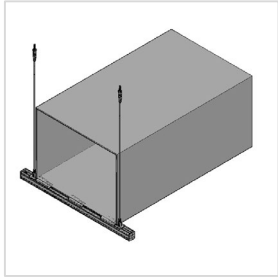


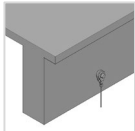
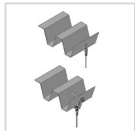
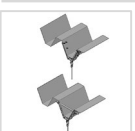
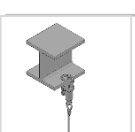
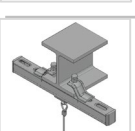
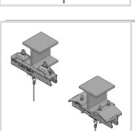
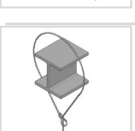
## TERMS OF COMMON COOPERATION / LEGAL DISCLAIMERS

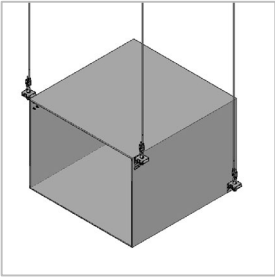

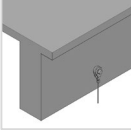
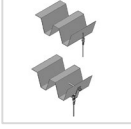

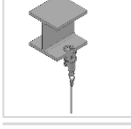
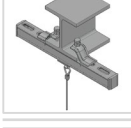
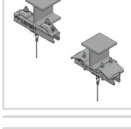

Hilti strives to achieve continuous development and innovation. This manual is thus subject to change without notice. Hilti strongly advises customers to verify the respective product application for the intended use by consulting a structural engineer and making the necessary calculations to ensure compliance with the applicable norms and standards. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use and within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature. Due to the fact that construction materials and environmental conditions vary widely, information given in this manual is solely based on principles and safety factors believed to be correct at the time they were established. The customer is ultimately responsible for checking the present condition of supporting materials and the applicability of the selected product application. Hilti shall not be liable for direct, indirect, incidental or consequential damages, losses or expenses in connection with any information contained in this manual or in connection with, or by reason of, the use of, or inability to use the products for any intended purpose. This limitation of liability does not apply to personal damages culpably caused by Hilti. Implied warranties of merchantability or fitness of the products are herewith expressly excluded.

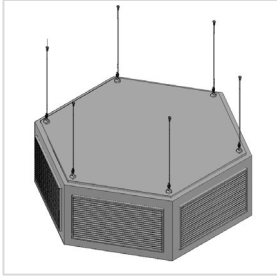

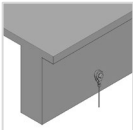


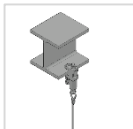
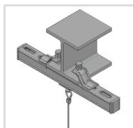
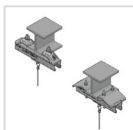



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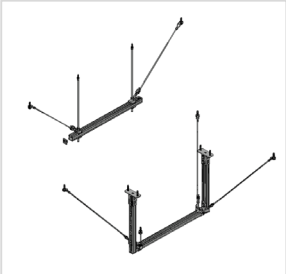


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## MW-SPECIFIC GENERAL NOTES





- This application is for static loading only not including lifting or nor accessed by persons
- Hilti wire ropes are manufactured according ASTM-A1023 and are not pre-stretched. When installing, it must be considered that the wire ropes undergo a constructional stretch (extension). The constructional stretch according ASTM-A1023 (extension) is the amount of extension that is attributed to the initial bedding down of wires within the strands and the strands within the rope due to loading. Initial extension cannot be determined by calculation. Stretching over time also uncertain. The height of the suspended parts can be adjusted with the lock.
- Please always refer to the latest instruction manual of the supported media, for example: pipes or cable trays, structures and attachments. The media needs to withstand the local wire rope force, taking into account the angle of loading.
- The wire rope shall not be connected with a hardened steel (max. 170 HB) interface.
- The wire rope interface shall be free of sharp corners (min. 0.5mm x 45° or radius 0.5mm with a minimum thickness of 5mm) to avoid local damage of the wire rope.
- Check that all parts are not damaged before installing. For example, a bent wire will not fit properly in the lock or could disable the locking mechanism.
- Only one wire may be suspended from each connector and/or anchor.
- Before installing, the instructions for use must be consulted.
- Oil, grease, paint and dirt can reduce the load capacity of the wire system and must be avoided.
- The load capacity values are only valid when this system is used exclusively with Hilti locks, wires, connectors and anchors in the recommended combinations shown in the ITM (larger diameter anchors are permitted).
- Ensure the correct cutting tool is used to cut the wire, as shown in the instructions for use. The cut wire end must be protected from fraying. If the wrong cutting tool is used the wire may not fit into the lock or could unravel over time.
- The wire system locks, MW-L and MW-CL together with wire can be reused maximum 3 times during installation (loaded to maximum load), for the purpose of adjusting the position. Without loading the locks can be repositioned as many times as necessary. The MW-C clip is single-use only.
- For all MW-EB eye-bolt loop applications the load must be applied such that the eye-bolt and wire are aligned ( $\pm 5^\circ$ ). Counter nuts must be used as shown in the ITM to ensure the eye-bolt does not loosen over time.
- For any applications requiring angles  $> 5^\circ$  the MW-C clip in combination with MW-LP wire loop must be used.

## CONDITIONS FOR TRANSPORT, STORAGE AND USAGE

- Packaging of all wire system items must not be damaged during transport and storage.
- All wire system items must be transported, stored and used in a dry, indoor (non-condensing) atmosphere
- Corrosion protection class C1 - C2 (medium), 15 years ((based on EN ISO 12944-6 and EN ISO 12944-1). For C2 please contact Hilti Engineering Services.
- Do not use in corrosive or chlorinated environments.
- Temperatures:
  - Transportation, storage and operation:  $-20^\circ\text{C}$  to  $50^\circ\text{C}$
  - Assembly  $-5^\circ\text{C}$  to  $50^\circ\text{C}$
- Can be used with various base materials. The customer must ensure that the base materials and anchors used have a sufficient load capacity.
- For further information please contact Hilti engineering services.

# KIT & ITEM SELECTION TABLE

## MW Wire & Lock Kits

	Wire no.	1.5	2.0	3.0	5.0
	Working load limit	30 kg	56 kg	113kg	270kg
<b>Kit wire &amp; lock</b>	<b>Wire length</b>				
 MW-EB M8/10/12 L Kit	1m	2280019	2280044	2280049	2280054
	2m	2280040	2280045	2280050	2280055
	3m	2280041	2280046	2280051	2280056
	5m	2280042	2280047	2280052	2280057
	10m	2280043	2280048	2280053	2280058
 MW-LP L Kit	1m	2280072	2280077	2280082	2287096
	2m	2280073	2280078	2280083	2287097
	3m	2280074	2280079	2280084	2287098
	5m	2280075	2280080	2280085	2287099
	10m	2280076	2280081	2280086	2287580
	Wire no.	1.5	2.0	3.0	5.0
	Working load limit		46kg	98kg	
<b>Channel lock &amp; wire</b>	<b>Wire length</b>				
 MW-EB M8 CL Kit	1m		2280062	2280067	
	2m		2280063	2280068	
	3m		2280064	2280069	
	5m		2280065	2280070	
	10m		2280066	2280071	
 MW-LP CL Kit	1m		2280087	2280092	
	2m		2280088	2280093	
	3m		2280089	2280094	
	5m		2280090	2280095	
	10m		2280091	2280096	

# KIT & ITEM SELECTION TABLE

## MW Accessories

### Application



MW-C Clip

MW-DH Deck Hook

MW-EB Eyebolt

Wire no.	Item no.
1.5	2287563
2.0	2287563
3.0	2287563
5.0	2287563

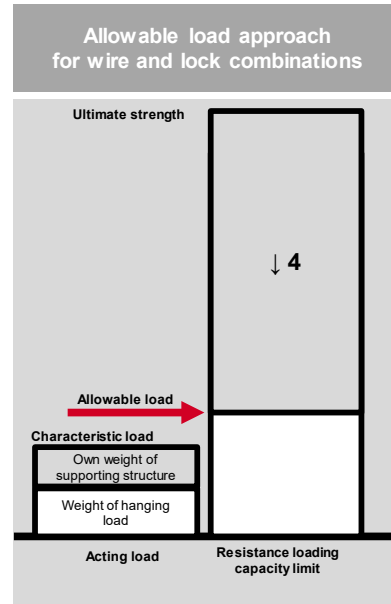
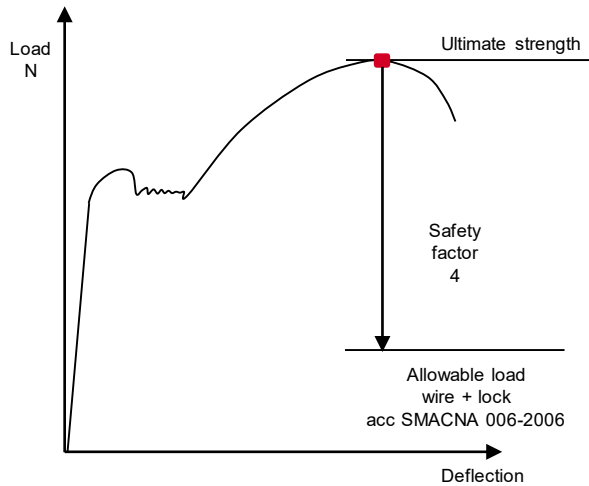
Wire no.	Item no.
1.5	2277567
2.0	2277567
3.0	x
5.0	x

Thread size	Thread length	Item no.
M8	26mm	2277563
M10	39mm	2277565

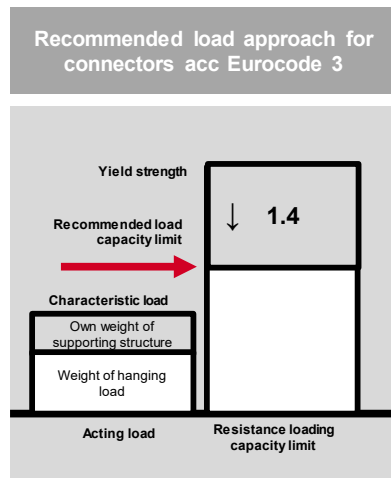
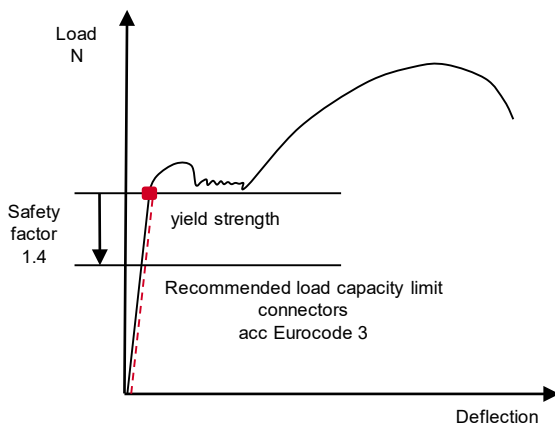


# SAFETY FACTORS USED TO CALCULATE LOAD CAPACITIES

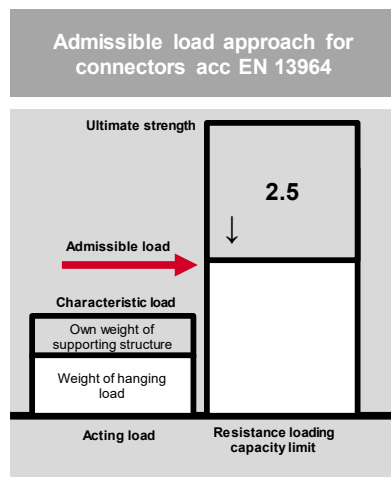
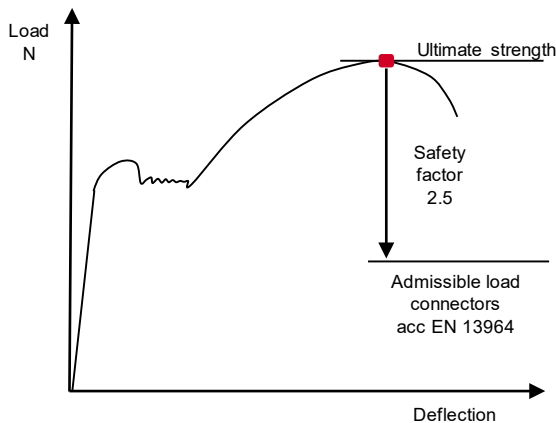
For all **lock and wire combinations**, the **allowable loads** are calculated from the normalized ultimate limit with a safety factor of 4 according to SMACNA 006-2006 (HVAC duct construction standards). SMACNA 006-2006 does not require normalization however this was done as an extra measure to account for the variation in ultimate limit possible with wire produced according to ASTM A1023. Unlike Eurocode 3, SMACNA 006-2006 does not differentiate between the recommended load and the design load but only states an allowable load which must not be exceeded.



For the **connectors MW-C, MW-DH and MW-EB**, the **recommended load** capacity limits are calculated from the normalized yield strength with a safety factor of 1.4 according to Eurocode 3 (DIN EN 1993).



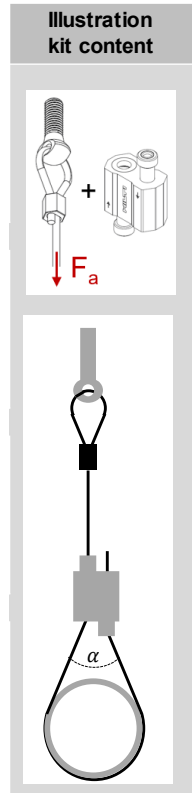
Where the **CE certification according to EN 13964 for suspended ceilings** is required, the **admissible loads** of all wire system components are calculated from the normalized ultimate strength with a safety factor of at least 2.5. EN 13964 does not differentiate between recommended load and design load but only states an admissible load which must not be exceeded.



# LOCK AND WIRE KITS ACCORDING TO SMACNA 006-2006

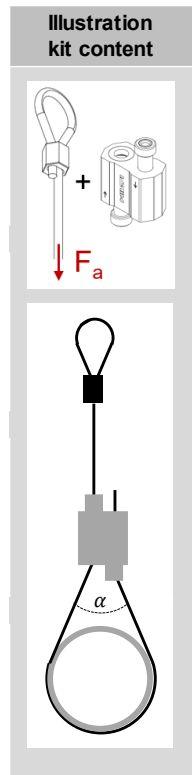
## Allowable loads for lock and wire kits according to SMACNA 006-2006

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Allowable load +F <sub>a</sub>	
Kit MW-EB M8 L 1.5/1m	2280019	2278645	2277466	1.5	1m	0.29 kN	30 kg
Kit MW-EB M8 L 1.5/2m	2280040	2278646			2m		
Kit MW-EB M8 L 1.5/3m	2280041	2278647			3m		
Kit MW-EB M8 L 1.5/5m	2280042	2278648			5m		
Kit MW-EB M8 L 1.5/10m	2280043	2278649			10m		
Kit MW-EB M8 L 2.0/1m	2280044	2278690	2277467	2.0	1m	0.55 kN	56 kg
Kit MW-EB M8 L 2.0/2m	2280045	2278691			2m		
Kit MW-EB M8 L 2.0/3m	2280046	2278692			3m		
Kit MW-EB M8 L 2.0/5m	2280047	2278693			5m		
Kit MW-EB M8 L 2.0/10m	2280048	2278694			10m		
Kit MW-EB M8 L 3.0/1m	2280049	2278703	2277468	3.0	1m	1.11 kN	113 kg
Kit MW-EB M8 L 3.0/2m	2280050	2278704			2m		
Kit MW-EB M8 L 3.0/3m	2280051	2278695			3m		
Kit MW-EB M8 L 3.0/5m	2280052	2278696			5m		
Kit MW-EB M8 L 3.0/10m	2280053	2278705			10m		
Kit MW-EB M10 L 5.0/1m	2280054	2278642	2277469	5.0	1m	2.65 kN	270 kg
Kit MW-EB M10 L 5.0/2m	2280055	2278697			2m		
Kit MW-EB M10 L 5.0/3m	2280056	2278698			3m		
Kit MW-EB M10 L 5.0/5m	2280057	2278699			5m		
Kit MW-EB M10 L 5.0/10m	2280058	2278700			10m		



The shown load values of allowable loads are based on a safety factor to ultimate strength of 4 as per SMACNA 006-2006 HVAC duct construction guidelines, valid for an opening angle  $\alpha$  of up to 60°. Note: final load for a support depends on the set up of the used items! The load capacities of all connected parts must be considered.

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Allowable load +F <sub>a</sub>	
Kit MW-LP L 1.5/1m	2280072	2277568	2277466	1.5	1m	0.29 kN	30 kg
Kit MW-LP L 1.5/2m	2280073	2277569			2m		
Kit MW-LP L 1.5/3m	2280074	2277570			3m		
Kit MW-LP L 1.5/5m	2280075	2277571			5m		
Kit MW-LP L 1.5/10m	2280076	2277572			10m		
Kit MW-LP L 2.0/1m	2280077	2277573	2277467	2.0	1m	0.55 kN	56 kg
Kit MW-LP L 2.0/2m	2280078	2277574			2m		
Kit MW-LP L 2.0/3m	2280079	2277575			3m		
Kit MW-LP L 2.0/5m	2280080	2277576			5m		
Kit MW-LP L 2.0/10m	2280081	2277577			10m		
Kit MW-LP L 3.0/1m	2280082	2277578	2277468	3.0	1m	1.11 kN	113 kg
Kit MW-LP L 3.0/2m	2280083	2277579			2m		
Kit MW-LP L 3.0/3m	2280084	2277580			3m		
Kit MW-LP L 3.0/5m	2280085	2277581			5m		
Kit MW-LP L 3.0/10m	2280086	2277582			10m		
Kit MW-LP L 5.0/1m	2287096	2287558	2277469	5.0	1m	2.65 kN	270 kg
Kit MW-LP L 5.0/2m	2287097	2287559			2m		
Kit MW-LP L 5.0/3m	2287098	2287560			3m		
Kit MW-LP L 5.0/5m	2287099	2287561			5m		
Kit MW-LP L 5.0/10m	2287580	2287562			10m		



The shown load values of allowable loads are based on a safety factor to ultimate strength of 4 as per SMACNA 006-2006 HVAC duct construction guidelines, valid for an opening angle  $\alpha$  of up to 60°. Note: final load for a support depends on the set up of the used items! The load capacities of all connected parts must be considered.

# LOCK AND WIRE KITS ACCORDING TO SMACNA 006-2006

## Allowable loads for channel lock and wire kits according to SMACNA 006-2006

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Allowable load +F <sub>a</sub>		Illustration kit content
Kit MW-EB M8 CL 2.0/1m	2280062	2278690	2277562	2.0	1m	0.45 kN	46 kg	
Kit MW-EB M8 CL 2.0/2m	2280063	2278691			2m			
Kit MW-EB M8 CL 2.0/3m	2280064	2278692			3m			
Kit MW-EB M8 CL 2.0/5m	2280065	2278693			5m			
Kit MW-EB M8 CL 2.0/10m	2280066	2278694			10m			
Kit MW-EB M8 CL 3.0/1m	2280067	2278703	2277562	3.0	1m	0.96 kN	98 kg	
Kit MW-EB M8 CL 3.0/2m	2280068	2278704			2m			
Kit MW-EB M8 CL 3.0/3m	2280069	2278695			3m			
Kit MW-EB M8 CL 3.0/5m	2280070	2278696			5m			
Kit MW-EB M8 CL 3.0/10m	2280071	2278705			10m			

The shown load values of allowable loads are based on a safety factor to ultimate strength of 4 as per SMACNA 006-2006 HVAC duct construction guidelines. These values are only valid when the wire is aligned with the axis of the eye bolt ( $\pm 5^\circ$ ) and hanging vertically.

Note: final load for a support is depending on the set up of the used items! The load capacities of all connected parts must be considered.

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Allowable load +F <sub>a</sub>		Illustration kit content
Kit MW-LP CL 2.0/1m	2280087	2277573	2277562	2.0	1m	0.45 kN	46 kg	
Kit MW-LP CL 2.0/2m	2280088	2277574			2m			
Kit MW-LP CL 2.0/3m	2280089	2277575			3m			
Kit MW-LP CL 2.0/5m	2280090	2277576			5m			
Kit MW-LP CL 2.0/10m	2280091	2277577			10m			
Kit MW-LP CL 3.0/1m	2280092	2277578	2277562	3.0	1m	0.96 kN	98 kg	
Kit MW-LP CL 3.0/2m	2280093	2277579			2m			
Kit MW-LP CL 3.0/3m	2280094	2277580			3m			
Kit MW-LP CL 3.0/5m	2280095	2277581			5m			
Kit MW-LP CL 3.0/10m	2280096	2277582			10m			

The shown load values of allowable loads are based on a safety factor to ultimate strength of 4 as per SMACNA 006-2006 HVAC duct construction guidelines. These values are only valid when the wire is aligned with the axis of the channel lock ( $\pm 5^\circ$ ) and hanging vertically.

Note: final load for a support is depending on the set up of the used items! The load capacities of all connected parts must be considered.

# CONNECTORS ACCORDING TO EUROCODE 3

## Recommended load capacity limits for connectors according to Eurocode 3

Order description	Item number	Wire rope size	Recommended load +F <sub>x</sub>		Illustration
			kN	kg	
MW-DH	2277567	≤ 2.0	0.55 kN	56 kg	

Shown load values are the recommended loads capacity limits for vertical loads only. The partial safety factor for the action is 1.4 relative to the yield strength according to Eurocode 3. Note: Load capacity of interface (profiled sheet metal) needs to be validated separately.

MW-EB M8x26	2277563	≤ 3.0	7.3 kN	745 kg	
MW-EB M10x39	2277565	≤ 5.0	10.8 kN	1101 kg	

The shown load values are the recommended loads capacity limits. The partial safety factor for the action is 1.4 relative to the yield strength according to Eurocode 3. The load capacities of all connected parts must be considered.

Note: These values are only valid when the applied load is aligned with the axis of the eye bolt (± 5°)

MW-C	2287563	≤ 5.0	4.91 kN	500 kg	
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The shown load values are the recommended loads capacity limits. The partial safety factor for the action is 1.4 relative to the yield strength according to Eurocode 3. Load values are valid for α = 0° - 90°. The load capacities of all connected parts must be considered.

Note: Transferred load to anchor depends on prying factor of MW-C at angle α. See table "Prying factor MW-C"

## Design load capacity limits for connectors according to Eurocode 3

Order description	Item number	Wire rope size	Design load +F <sub>x</sub>		Illustration
			kN	kg	
MW-DH	2277567	≤ 2.0	0.77 kN	78.4 kg	

The shown load values are design load capacity limits for vertical loads only. The partial safety factor for the action is 1.0.

Note: Load capacity of interface (profiled sheet metal) needs to be validated separately

MW-EB M8x26	2277563	≤ 3.0	10.2 kN	1043 kg	
MW-EB M10x39	2277565	≤ 5.0	15.1 kN	1541 kg	

The shown load values are design load capacity limits. The partial safety factor for the action is 1.0. The load capacities of all connected parts must be considered. Note: These values are only valid when the load is applied at an angle of 0° ± 5° relative to the axis of the eye bolt.

MW-C	2287563	≤ 5.0	6.83 kN	700 kg	
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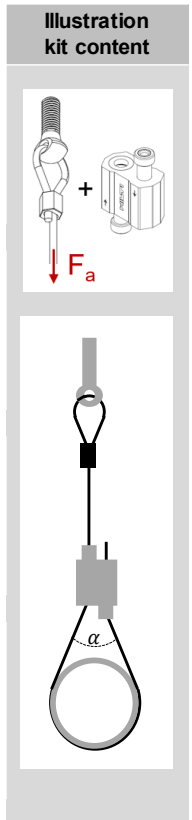
The shown load values are design load capacity limits. The partial safety factor for the action is 1.0. Load values are valid for α = 0° - 90°. The load capacities of all connected parts must be considered.

Note: Transferred load to anchor depends on prying factor of MW-C at angle α. See table "Prying factor MW-C"

# SUSPENDED CEILINGING ACCORDING TO EN 13964

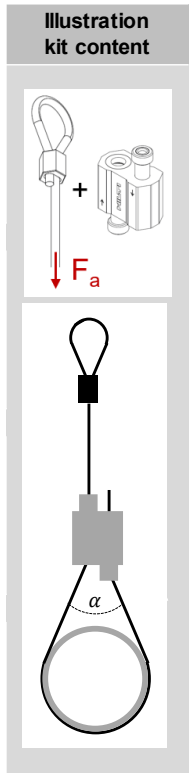
## Admissible loads for lock and wire kits according to EN 13964

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Admissible load +F <sub>a</sub>	
Kit MW-EB M8 L 1.5/1m	2280019	2278645	2277466	1.5	1m	0.29 kN	30 kg
Kit MW-EB M8 L 1.5/2m	2280040	2278646			2m		
Kit MW-EB M8 L 1.5/3m	2280041	2278647			3m		
Kit MW-EB M8 L 1.5/5m	2280042	2278648			5m		
Kit MW-EB M8 L 1.5/10m	2280043	2278649			10m		
Kit MW-EB M8 L 2.0/1m	2280044	2278690	2277467	2.0	1m	0.55 kN	56 kg
Kit MW-EB M8 L 2.0/2m	2280045	2278691			2m		
Kit MW-EB M8 L 2.0/3m	2280046	2278692			3m		
Kit MW-EB M8 L 2.0/5m	2280047	2278693			5m		
Kit MW-EB M8 L 2.0/10m	2280048	2278694			10m		
Kit MW-EB M8 L 3.0/1m	2280049	2278703	2277468	3.0	1m	1.11 kN	113 kg
Kit MW-EB M8 L 3.0/2m	2280050	2278704			2m		
Kit MW-EB M8 L 3.0/3m	2280051	2278695			3m		
Kit MW-EB M8 L 3.0/5m	2280052	2278696			5m		
Kit MW-EB M8 L 3.0/10m	2280053	2278705			10m		
Kit MW-EB M10 L 5.0/1m	2280054	2278642	2277469	5.0	1m	2.65 kN	270 kg
Kit MW-EB M10 L 5.0/2m	2280055	2278697			2m		
Kit MW-EB M10 L 5.0/3m	2280056	2278698			3m		
Kit MW-EB M10 L 5.0/5m	2280057	2278699			5m		
Kit MW-EB M10 L 5.0/10m	2280058	2278700			10m		



The shown load values are the "admissible loads" calculated according to EN 13964, valid for an opening angle  $\alpha$  of up to 60°. Note: final load for a support is depending on the set up of the used items! The load capacities of all connected parts must be considered.

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Admissible load +F <sub>a</sub>	
Kit MW-LP L 1.5/1m	2280072	2277568	2277466	1.5	1m	0.29 kN	30 kg
Kit MW-LP L 1.5/2m	2280073	2277569			2m		
Kit MW-LP L 1.5/3m	2280074	2277570			3m		
Kit MW-LP L 1.5/5m	2280075	2277571			5m		
Kit MW-LP L 1.5/10m	2280076	2277572			10m		
Kit MW-LP L 2.0/1m	2280077	2277573	2277467	2.0	1m	0.55 kN	56 kg
Kit MW-LP L 2.0/2m	2280078	2277574			2m		
Kit MW-LP L 2.0/3m	2280079	2277575			3m		
Kit MW-LP L 2.0/5m	2280080	2277576			5m		
Kit MW-LP L 2.0/10m	2280081	2277577			10m		
Kit MW-LP L 3.0/1m	2280082	2277578	2277468	3.0	1m	1.11 kN	113 kg
Kit MW-LP L 3.0/2m	2280083	2277579			2m		
Kit MW-LP L 3.0/3m	2280084	2277580			3m		
Kit MW-LP L 3.0/5m	2280085	2277581			5m		
Kit MW-LP L 3.0/10m	2280086	2277582			10m		
Kit MW-LP L 5.0/1m	2287096	2287558	2277469	5.0	1m	2.65 kN	270 kg
Kit MW-LP L 5.0/2m	2287097	2287559			2m		
Kit MW-LP L 5.0/3m	2287098	2287560			3m		
Kit MW-LP L 5.0/5m	2287099	2287561			5m		
Kit MW-LP L 5.0/10m	2287580	2287562			10m		



The shown load values are the "admissible loads" calculated according to EN 13964, valid for an opening angle  $\alpha$  of up to 60°. Note: final load for a support is depending on the set up of the used items! The load capacities of all connected parts must be considered.



# SUSPENDED CEILINGS ACCORDING TO EN 13964

## Admissible loads for channel lock and wire kits according to EN 13964

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Admissible load +F <sub>a</sub>		Illustration kit content
Kit MW-EB M8 CL 2.0/1m	2280062	2278690	2277562	2.0	1m	0.45 kN	46 kg	
Kit MW-EB M8 CL 2.0/2m	2280063	2278691			2m			
Kit MW-EB M8 CL 2.0/3m	2280064	2278692			3m			
Kit MW-EB M8 CL 2.0/5m	2280065	2278693			5m			
Kit MW-EB M8 CL 2.0/10m	2280066	2278694			10m			
Kit MW-EB M8 CL 3.0/1m	2280067	2278703	2277562	3.0	1m	0.96 kN	98 kg	
Kit MW-EB M8 CL 3.0/2m	2280068	2278704			2m			
Kit MW-EB M8 CL 3.0/3m	2280069	2278695			3m			
Kit MW-EB M8 CL 3.0/5m	2280070	2278696			5m			
Kit MW-EB M8 CL 3.0/10m	2280071	2278705			10m			

The shown load values are the "admissible loads" calculated according to EN 13964.

These values are only valid when the wire is aligned with the axis of the eye bolt ( $\pm 5^\circ$ ) and hanging vertically.

Note: final load for a support is depending on the set-up of all used items! The load capacities of all connected parts must be considered.

Order description	Item number Kit	Item number Component Wire	Item number Component Lock	Wire rope size	Wire length	Admissible load +F <sub>a</sub>		Illustration kit content
Kit MW-LP CL 2.0/1m	2280087	2277573	2277562	2.0	1m	0.45 kN	46 kg	
Kit MW-LP CL 2.0/2m	2280088	2277574			2m			
Kit MW-LP CL 2.0/3m	2280089	2277575			3m			
Kit MW-LP CL 2.0/5m	2280090	2277576			5m			
Kit MW-LP CL 2.0/10m	2280091	2277577			10m			
Kit MW-LP CL 3.0/1m	2280092	2277578	2277562	3.0	1m	0.96 kN	98 kg	
Kit MW-LP CL 3.0/2m	2280093	2277579			2m			
Kit MW-LP CL 3.0/3m	2280094	2277580			3m			
Kit MW-LP CL 3.0/5m	2280095	2277581			5m			
Kit MW-LP CL 3.0/10m	2280096	2277582			10m			

The shown load values are the "admissible loads" calculated according to EN 13964.

These values are only valid when the wire is aligned with the axis of the eye bolt ( $\pm 5^\circ$ ) and hanging vertically.

Note: final load for a support is depending on the set-up of all used items! The load capacities of all connected parts must be considered..

## Admissible loads for connectors according EN 13964

Order description	Item number	Wire rope size	Admissible load +F <sub>a</sub>		Illustration
MW-DH	2277567	$\leq 2.0$	0.48 kN	49 kg	

The shown load values are the "admissible loads" calculated according to EN 13964.

Note: Load capacity of interface (profiled sheet metal) needs to be validated separately

MW-EB M8x26	2277563	$\leq 3.0$	5.32 kN	542 kg	
MW-EB M10x39	2277565	$\leq 5.0$	9.22 kN	939 kg	

The shown load values are the "admissible loads" calculated according to EN 13964.

Note: These values are only valid when the load is applied at an angle of  $0^\circ \pm 5^\circ$  relative to the axis of the eye bolt.

MW-C	2287563	$\leq 5.0$	4.91 kN	500 kg	
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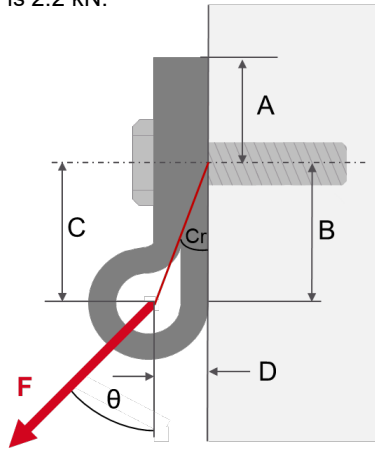
The shown load values are the "admissible loads" calculated according to EN 13964.

Load values are valid for  $\alpha = 0^\circ - 90^\circ$ .

Note: The load transferred to the anchor depends on the prying factor of MW-C at angle  $\alpha$ . See table "Prying factor MW-C"

# PRYING FACTOR OF MW-C AND THE FORCE TRANSFERRED TO THE ANCHOR

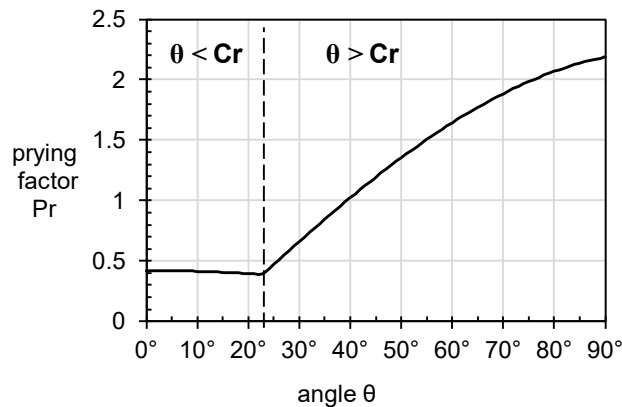
The load capacities of all connected components must be considered in combination with all MW items. In particular, the effective force transferred to the anchor must be considered and compared with the load capacity of the anchor. When a load is suspended from a MW-C clip, the effective tensile force transferred to the anchor due to leverage effects can be calculated from the prying factor **Pr** using the formulas below (according to NFPA 13-2016). For example, where the angle  $\theta$  between base material and direction of loading is  $90^\circ$ , the prying factor **Pr** is 2.2. Accordingly, when 1 kN is hung from the clip, the tensile force transferred to the anchor is 2.2 kN.



A	B	C	D	Cr
16 mm	19 mm	19 mm	8 mm	22.8°

**For  $\theta < Cr$**

$$Pr = \frac{\left(\frac{D}{\tan(\theta)}\right) - (C - B)}{B}$$



**For  $\theta > Cr$**

$$Pr = \frac{(C + A) - \left(\frac{D}{\tan(\theta)}\right)}{A}$$

For example, when the MW-C clip is used at the maximum load of 500 kg ( $F = 4.91$  kN), the prying factor and effective tensile load transferred to the anchor for different angles is shown in the table below. The higher the angle, the higher the tensile load resulting at the anchor. For certain set-ups, the load capacity of the anchor within a certain base material may be the limiting factor. This must be calculated to ensure that the load capacity of the anchor is not exceeded.

Angle relative to the base material, $\theta$	0°	15°	30°	45°	60°	75°	90°
Prying factor, <b>Pr</b>	0.42	0.41	0.66	1.19	1.65	1.99	2.19
Tensile load (kN) transferred to the anchor at the maximum load capacity of the clip ( $F = 4.91$ kN)	2.07	2.00	3.26	5.86	8.08	9.75	10.76

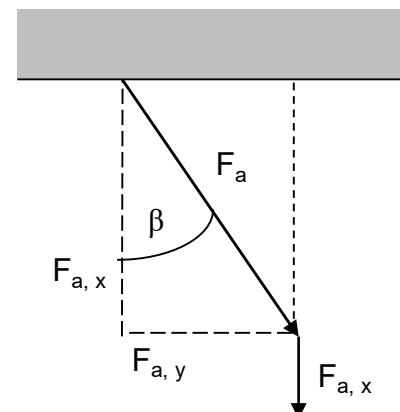
## HANGING AT NON-VERTICAL ANGLES

When a load is not hung vertically, the angle,  $\beta$ , is the angle of the load relative to the vertical axis. The tables of allowed loads  $F_a$  for the **wire kits** are based on the load being suspended vertically  $\beta = 0^\circ$ . For any other angle ( $\beta > 0^\circ$ ), the vertical component of the allowed load  $F_{a,x}$  is reduced according to trigonometry using the formula below:

$$F_{a,x} = F_a \cos(\beta)$$

The horizontal load can also be calculated:

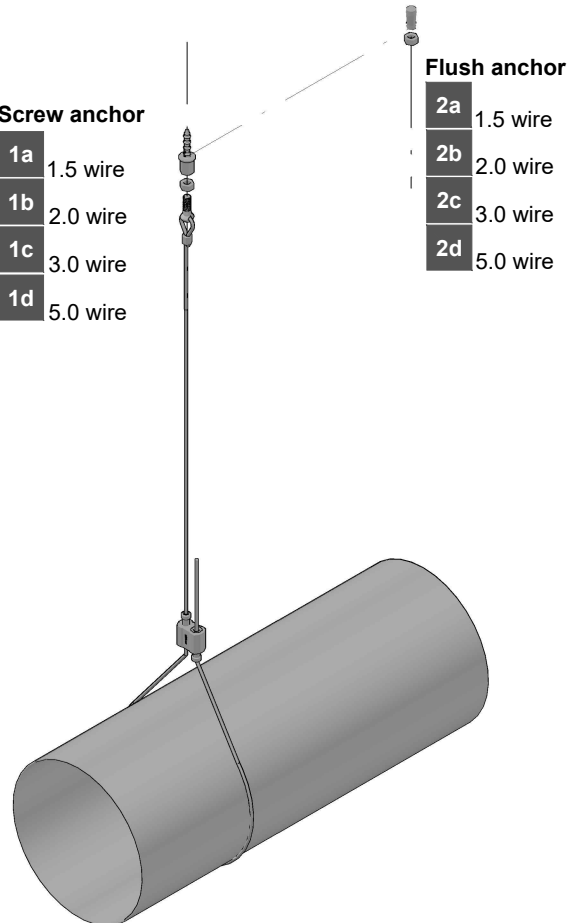
$$F_{a,y} = F_a \sin(\beta)$$





# Ventilation - Single Fastening Point Fixed On a Concrete Slab:

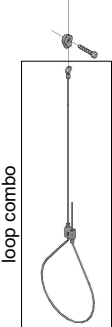
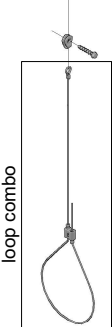
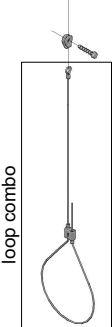
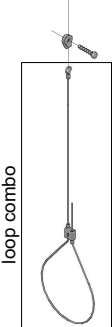
<b>1a</b>  eyebolt combo	<b>1a</b> Screw anchor, M8 support 1.5 wire 1x screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043	<b>2a</b>  eyebolt combo	<b>2a-c</b> Flush anchor, M8 support 1.5, 2.0, 3.0 wire Anchor 1x flush anchor HKD M8x25 anchor 376957 HKD M8x30 anchor 376959 HKD M8x40 anchor 376961 M8 nut 2184504 Eyebolt combo 1x the same combos as <b>2a</b> <b>1a</b> <b>2b</b> <b>1b</b> <b>2c</b> <b>1c</b>
	<b>1b</b> Screw anchor, M8 support 2.0 wire 1x screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048		<b>2d</b> Flush anchor, M10 support 5.0 wire Anchor 1x flush anchor HKD M10x25 anchor 2037453 HKD M10x30 anchor 376965 HKD M10x40 anchor 376967 M10 nut 2184505 Eyebolt combo 1x the same combos as <b>2d</b> <b>1d</b>
<b>1c</b>  eyebolt combo	<b>1c</b> Screw anchor, M8 support 3.0 wire 1x screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053		<b>2a</b> 1.5 wire <b>2b</b> 2.0 wire <b>2c</b> 3.0 wire <b>2d</b> 5.0 wire
<b>1d</b>  eyebolt combo	<b>1d</b> Screw anchor, M10 support 5.0 wire 1x screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M10 nut 2184505 Eyebolt combo 1x eyebolt and lock Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058		

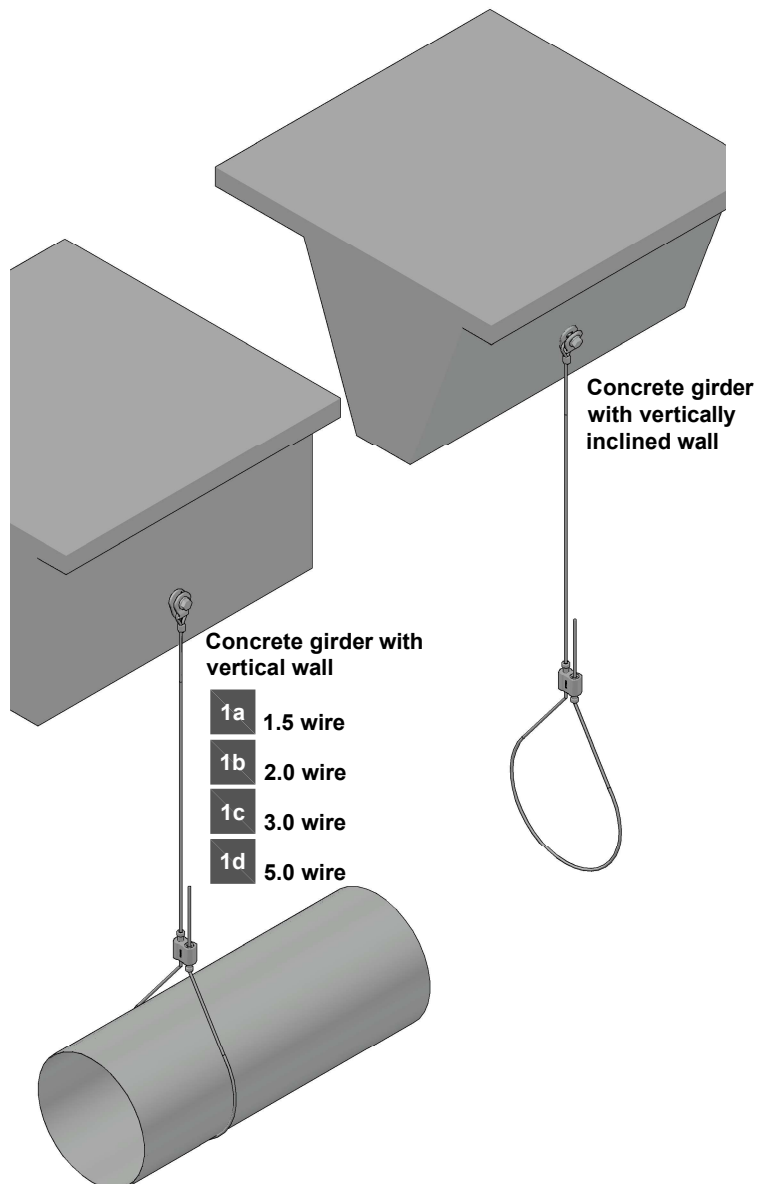


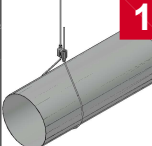
Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Concrete		1 Wire system	Concrete
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the anchor within the chosen base material</li> <li>Only for vertically suspended loads. Eye-bolt not suitable for bracing.</li> </ul>		Anchors	

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# Ventilation - Single Fastening Point Fixed On Side Of a Concrete Girder:

<p><b>1a</b></p>  <p>loop combo</p>	<p><b>1a</b> Clip Attachment 1.5 wire</p> <p><b>Clip</b> 1x MW-C clip 2287563 Anchor 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Loop combo</b> 1x Loop and lock Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076</p>
<p><b>1b</b></p>  <p>loop combo</p>	<p><b>1b</b> Clip Attachment 2.0 wire</p> <p><b>Clip</b> 1x MW-C clip 2287563 Anchor 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Loop combo</b> 1x loop and lock Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081</p>
<p><b>1c</b></p>  <p>loop combo</p>	<p><b>1c</b> Clip Attachment 3.0 wire</p> <p><b>Clip</b> 1x MW-C clip 2287563 Anchor 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Loop combo</b> 1x loop and lock Kit MW-LP L 3.0/1m 2280082 Kit MW-LP L 3.0/2m 2280083 Kit MW-LP L 3.0/3m 2280084 Kit MW-LP L 3.0/5m 2280085 Kit MW-LP L 3.0/10m 2280086</p>
<p><b>1d</b></p>  <p>loop combo</p>	<p><b>1d</b> Clip Attachment 5.0 wire</p> <p><b>Clip</b> 1x MW-C clip 2287563 Anchor 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Loop combo</b> 1x loop and lock Kit MW-LP L 5.0/1m 2287096 Kit MW-LP L 5.0/2m 2287097 Kit MW-LP L 5.0/3m 2287098 Kit MW-LP L 5.0/5m 2287099 Kit MW-LP L 5.0/10m 2287580</p>



Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Side of a Concrete Girder	 <p><b>1</b></p>	Wire system	Concrete
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity with the capacity of the anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor</li> <li>Only one wire may be suspended on each clip</li> </ul>		Anchors	

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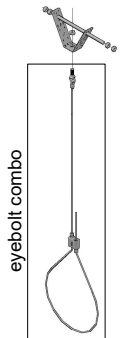

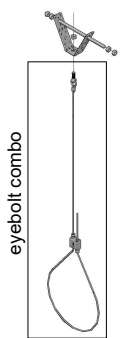
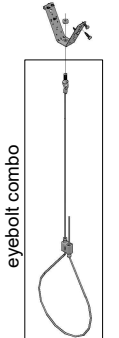
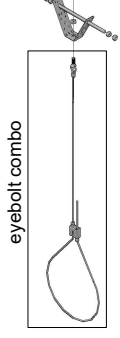
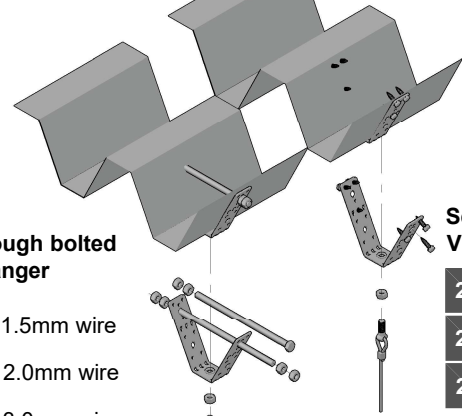
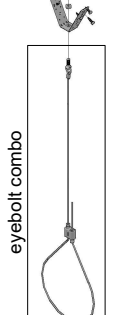
# Ventilation - Single Fastening Point Fixed On Metal Deck:

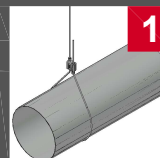
<p>loop combo</p>	<p><b>1a</b> Deck hook 1.5 wire</p> <p>Deck hook 1x MW-DH deck hook 2277567</p> <p>Loop combo 1x loop and lock</p> <p>Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076</p>	<p>eyebolt combo</p>	<p><b>2c</b> Through bolted V-hanger 3.0 wire</p> <p>V-Hanger 1x MF-TSH M8 V-hanger 229006 1x M8 nut 2184504</p> <p>Through-bolt version 1-t-rod 1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p>Through-bolt ver. 2-long h-head screw 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock</p> <p>Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053</p>
<p>loop combo</p>	<p><b>1b</b> Deck hook 2.0 wire</p> <p>Deck hook 1x MW-DH deck hook 2277567</p> <p>Loop combo 1x loop and lock</p> <p>Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081</p>	<p><b>Through bolted V-hanger</b></p> <p><b>2a</b> 1.5 wire <b>2b</b> 2.0 wire <b>2c</b> 3.0 wire</p>	
<p>eyebolt combo</p>	<p><b>2a</b> Through bolted V-hanger 1.5 wire</p> <p>V-Hanger 1x MF-TSH M8 V-hanger 229006 1x M8 nut 2184504</p> <p>Through-bolt version 1 t-rod 1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p>Through-bolt screw 1x M8x120 4.8 h-head screw 2063165 2x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock</p> <p>Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p>	<p><b>Deck hook</b></p> <p><b>1a</b> 1.5 wire <b>1b</b> 2.0 wire</p>	
<p>eyebolt combo</p>	<p><b>2b</b> Through bolted V-hanger 2.0 wire</p> <p>V-Hanger 1x MF-TSH M8 V-hanger 229006 1x M8 nut 2184504</p> <p>Through-bolt version 1-t-rod 1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p>Through-bolt ver. 2-long h-head screw 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock</p> <p>Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p>		

Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Metal Deck	<b>1</b>	Wire system	Metal deck
<b>General comments</b>		Anchors	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and where relevant the V-hanger</li> <li>The deck hook must hang vertically from the deck and is for vertical loads only.</li> <li>Only one wire may be suspended on each deck hook.</li> </ul>			

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# Ventilation - Single Fastening Point Fixed On Metal Deck:

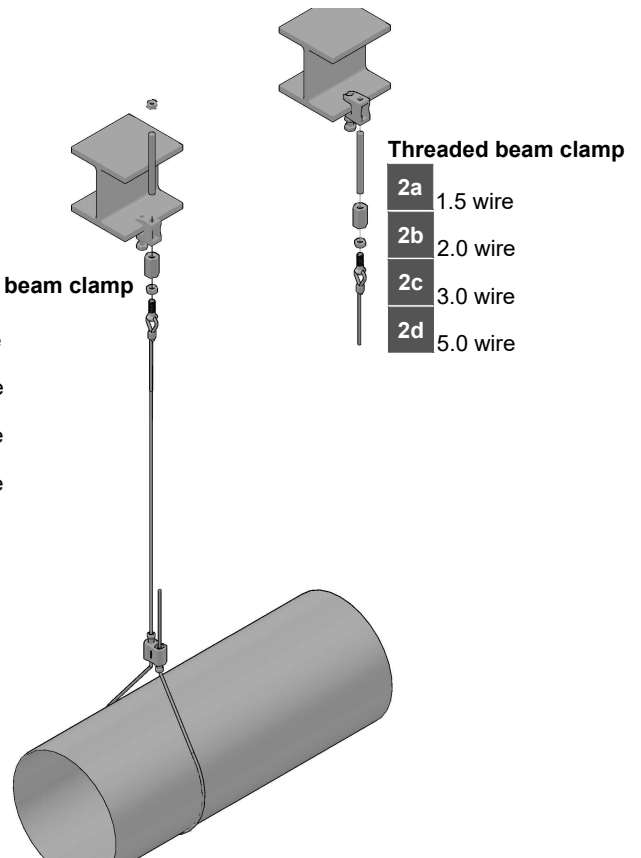
<p><b>1a</b></p>  <p>eyebolt combo</p>	<p><b>1a</b> Through bolted V hanger with integrated nut, 1.5 wire</p> <p><b>V-Hanger</b>            1x MVA-MS M8 V-hanger 386558            1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b>            1x AM8x1000 fixed t-rod 339793            4x M8 nut 2184504</p> <p><b>Eyebolt combo</b>            1x eyebolt and lock            Kit MW-EB M8 L 1.5/1m 2280019            Kit MW-EB M8 L 1.5/2m 2280040            Kit MW-EB M8 L 1.5/3m 2280041            Kit MW-EB M8 L 1.5/5m 2280042            Kit MW-EB M8 L 1.5/10m 2280043</p>	<p><b>2b</b></p>  <p>eyebolt combo</p>	<p><b>2b</b> Self-tapping screws and V-Hanger with integrated hex nut, 2.0 wire</p> <p><b>V-Hanger</b>            1x MVA-MS M8 V-hanger 386558            1x M8 nut 2184504</p> <p><b>Self-tapping screws</b>            6x S-MS 01Z 4.0x13 S-screw 406471</p> <p><b>Eyebolt combo</b>            1x eyebolt and lock            Kit MW-EB M8 L 2.0/1m 2280044            Kit MW-EB M8 L 2.0/2m 2280045            Kit MW-EB M8 L 2.0/3m 2280046            Kit MW-EB M8 L 2.0/5m 2280047            Kit MW-EB M8 L 2.0/10m 2280048</p>
<p><b>1b</b></p>  <p>eyebolt combo</p>	<p><b>1b</b> Through bolted V hanger with integrated nut, 2.0 wire</p> <p><b>V-Hanger</b>            1x MVA-MS M8 V-hanger 386558            1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b>            1x AM8x1000 fixed t-rod 339793            4x M8 nut 2184504</p> <p><b>Eyebolt combo</b>            1x eyebolt and lock            Kit MW-EB M8 L 2.0/1m 2280044            Kit MW-EB M8 L 2.0/2m 2280045            Kit MW-EB M8 L 2.0/3m 2280046            Kit MW-EB M8 L 2.0/5m 2280047            Kit MW-EB M8 L 2.0/10m 2280048</p>	<p><b>2c</b></p>  <p>eyebolt combo</p>	<p><b>2c</b> Self-tapping screws and V-Hanger with integrated hex nut, 3.0 wire</p> <p><b>V-Hanger</b>            1x MVA-MS M8 V-hanger 386558            1x M8 nut 2184504</p> <p><b>Self-tapping screws</b>            6x S-MS 01Z 4.0x13 S-screw 406471</p> <p><b>Eyebolt combo</b>            1x eyebolt and lock            Kit MW-EB M8 L 3.0/1m 2280049            Kit MW-EB M8 L 3.0/2m 2280050            Kit MW-EB M8 L 3.0/3m 2280051            Kit MW-EB M8 L 3.0/5m 2280052            Kit MW-EB M8 L 3.0/10m 2280053</p>
<p><b>1c</b></p>  <p>eyebolt combo</p>	<p><b>1c</b> Through bolted V hanger with integrated nut, 3.0 wire</p> <p><b>V-Hanger</b>            1x MVA-MS M8 V-hanger 386558            1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b>            1x AM8x1000 fixed t-rod 339793            4x M8 nut 2184504</p> <p><b>Eyebolt combo</b>            1x eyebolt and lock            Kit MW-EB M8 L 3.0/1m 2280049            Kit MW-EB M8 L 3.0/2m 2280050            Kit MW-EB M8 L 3.0/3m 2280051            Kit MW-EB M8 L 3.0/5m 2280052            Kit MW-EB M8 L 3.0/10m 2280053</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>Through bolted V-hanger</b></p> <p><b>1a</b> 1.5mm wire</p> <p><b>1b</b> 2.0mm wire</p> <p><b>1c</b> 3.0mm wire</p> </div> <div style="text-align: center;"> <p><b>Self tapping screws V-hanger</b></p> <p><b>2a</b> 1.5mm wire</p> <p><b>2b</b> 2.0mm wire</p> <p><b>2c</b> 3.0mm wire</p> </div> </div> 	
<p><b>2a</b></p>  <p>eyebolt combo</p>	<p><b>2a</b> Self-tapping screws and V-Hanger with integrated hex nut, 1.5 wire</p> <p><b>V-Hanger</b>            1x MVA-MS M8 V-hanger 386558            1x M8 nut 2184504</p> <p><b>Self-tapping screws</b>            6x S-MS 01Z 4.0x13 S-screw 406471</p> <p><b>Eyebolt combo</b>            1x eyebolt and lock            Kit MW-EB M8 L 1.5/1m 2280019            Kit MW-EB M8 L 1.5/2m 2280040            Kit MW-EB M8 L 1.5/3m 2280041            Kit MW-EB M8 L 1.5/5m 2280042            Kit MW-EB M8 L 1.5/10m 2280043</p>		

Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Metal Deck	 <p><b>1</b></p>	Wire system	Metal Deck
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and V-hanger</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		Anchors	

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# Ventilation - Single Fastening Point Fixed On Structural Steel Using Beam Clamp:

<p>1a</p>	<p>1a Unthreaded beam clamp 1.5 wire</p> <p>Beam clamp</p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p>Eyebolt combo</p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 1.5/1m 2280019</p> <p>Kit MW-EB M8 L 1.5/2m 2280040</p> <p>Kit MW-EB M8 L 1.5/3m 2280041</p> <p>Kit MW-EB M8 L 1.5/5m 2280042</p> <p>Kit MW-EB M8 L 1.5/10m 2280043</p>	<p>2a</p>	<p>2a-c Threaded beam clamp 1.5 - 3.0 wire</p> <p>Beam clamp</p> <p>1x MAB-M8 beam clamp 2006878</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x the same combos as</p> <p>2a → 1a    2b → 1b    2c → 1c</p>
	<p>1b</p>		<p>2b</p>
<p>1b</p>	<p>1b Unthreaded beam clamp 2.0 wire</p> <p>Beam clamp</p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p>Eyebolt combo</p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 2.0/1m 2280044</p> <p>Kit MW-EB M8 L 2.0/2m 2280045</p> <p>Kit MW-EB M8 L 2.0/3m 2280046</p> <p>Kit MW-EB M8 L 2.0/5m 2280047</p> <p>Kit MW-EB M8 L 2.0/10m 2280048</p>	<p>2d</p>	<p>2d Threaded beam clamp 5.0 wire</p> <p>Beam clamp</p> <p>1x MAB-M10 beam clamp 2006879</p> <p>1x M10x1000 4.8 threaded rod 339795</p> <p>1x M10x30 coupler 216704</p> <p>1x M10 nut 2184505</p> <p>Eyebolt combo</p> <p>1x the same combos as</p> <p>2d → 1d</p>
<p>1c</p>	<p>2c</p>		<p>2c</p>
<p>1c</p>	<p>1c Unthreaded beam clamp 3.0 wire</p> <p>Beam clamp</p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p>Eyebolt combo</p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 3.0/1m 2280049</p> <p>Kit MW-EB M8 L 3.0/2m 2280050</p> <p>Kit MW-EB M8 L 3.0/3m 2280051</p> <p>Kit MW-EB M8 L 3.0/5m 2280052</p> <p>Kit MW-EB M8 L 3.0/10m 2280053</p>	<p>2d</p>	<p>2d</p>
<p>1d</p>	<p>2d</p>		<p>2d</p>
<p>1d</p>	<p>1d Unthreaded beam clamp 5.0 wire</p> <p>Beam clamp</p> <p>1x MAB-11 beam clamp 375957</p> <p>2x M10 nut 2184505</p> <p>1x M10x1000 4.8 threaded rod 2140929</p> <p>1x M10x30 coupler 216704</p> <p>Eyebolt combo</p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M10 L 5.0/1m 2280054</p> <p>Kit MW-EB M10 L 5.0/2m 2280055</p> <p>Kit MW-EB M10 L 5.0/3m 2280056</p> <p>Kit MW-EB M10 L 5.0/5m 2280057</p> <p>Kit MW-EB M10 L 5.0/10m 2280058</p>	<p>Unthreaded beam clamp</p> <p>1a 1.5 wire</p> <p>1b 2.0 wire</p> <p>1c 3.0 wire</p> <p>1d 5.0 wire</p>	<p>Threaded beam clamp</p> <p>2a 1.5 wire</p> <p>2b 2.0 wire</p> <p>2c 3.0 wire</p> <p>2d 5.0 wire</p>

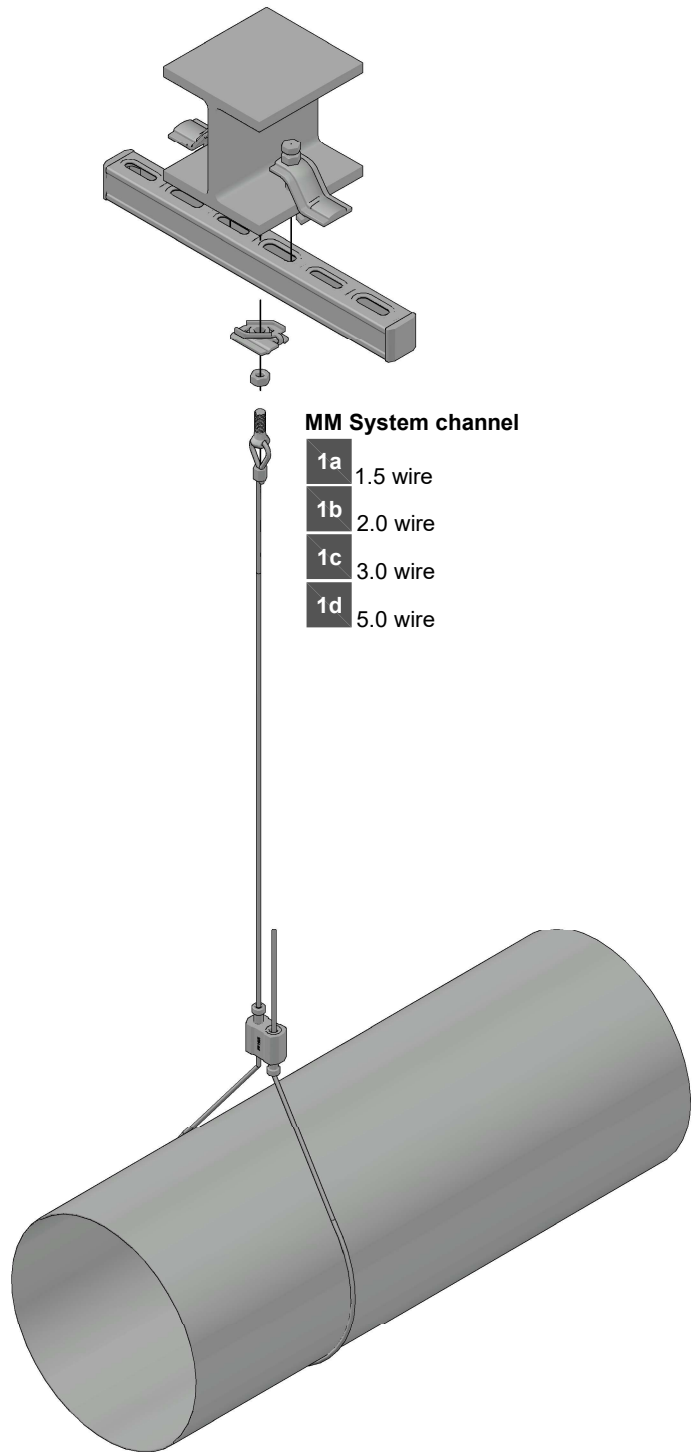


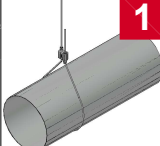
Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Structural Steel	<p>1</p>	Wire system	Structural steel
<p>General comments</p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the beam clamp and structural steel</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		Anchors	

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# Ventilation - Single Fastening Point Fixed On Structural Steel - Centric solution using MM Channel System:

<p><b>1a</b></p> <p>eyebolt combo</p>	<p><b>1a</b> Centric fixation of MM System channel, 1.5 wire</p> <p><b>Clamps</b> 2x MM-T-16-36 418763</p> <p><b>Channel e.g.</b> 1x MM-C-30 2m .....m 418749</p> <p><b>Saddle nut</b> 1x MM-S M8 418760</p> <p><b>Nut</b> 1x M8 nut 2184504</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p>
<p><b>1b</b></p> <p>eyebolt combo</p>	<p><b>1b</b> Centric fixation of MM System channel, 2.0 wire</p> <p><b>Clamps</b> 2x MM-T-16-36 418763</p> <p><b>Channel e.g.</b> 1x MM-C-30 2m .....m 418749</p> <p><b>Saddle nut</b> 1x MM-S M8 418760</p> <p><b>Nut</b> 1x M8 nut 2184504</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p>
<p><b>1c</b></p> <p>eyebolt combo</p>	<p><b>1c</b> Centric fixation of MM System channel, 3.0 wire</p> <p><b>Clamps</b> 2x MM-T-16-36 418763</p> <p><b>Channel e.g.</b> 1x MM-C-30 2m .....m 418749</p> <p><b>Saddle nut</b> 1x MM-S M8 418760</p> <p><b>Nut</b> 1x M8 nut 2184504</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053</p>
<p><b>1d</b></p> <p>eyebolt combo</p>	<p><b>1d</b> Centric fixation of MM System channel, 5.0 wire</p> <p><b>Clamps</b> 2x MM-T-16-36 418763</p> <p><b>Channel e.g.</b> 1x MM-C-30 2m .....m 418749</p> <p><b>Saddle nut</b> 1x MM-S M10 418761</p> <p><b>Nut</b> 1x M10 nut 2184505</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058</p>



Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Steel - MM System		Wire system	Steel
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>• Loading must always be compared with the capacity of all connected parts</li> <li>• Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MM System	

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# Ventilation - Single Fastening Point Fixed On Structural Steel - Centric solution using MQ Channel System:

<p>1a</p>	<p><b>1a</b> Centric fixation of MQ System channel, 1.5 wire</p> <p>2x MQT-U beam clamp 2115454          1x MQ-41 3m channel 369591          1x MQA-S-M8 saddle nut 2141906          1x M8 nut 2184504</p> <p>Eyebolt combo          1x eyebolt and lock          Kit MW-EB M8 L 1.5/1m 2280019          Kit MW-EB M8 L 1.5/2m 2280040          Kit MW-EB M8 L 1.5/3m 2280041          Kit MW-EB M8 L 1.5/5m 2280042          Kit MW-EB M8 L 1.5/10m 2280043</p>	<p>2a</p>	<p><b>2a - c</b> Centric fixation of MQ System channel, 1.5 - 3.0 wire</p> <p>2x MQT-21-41 beam clamp 369675          1x MQ-41 3m ...m channel 369591          1x MQA-S-M8 saddle nut 2141906          1x M8 nut 2184504</p> <p>Eyebolt combo          1x the same combos as</p> <p>2a → 1a    2b → 1b    2c → 1c</p>
<p>1b</p>	<p><b>1b</b> Centric fixation of MQ System channel, 2.0 wire</p> <p>2x MQT-U beam clamp 2115454          1x MQ-41 3m channel 369591          1x MQA-S-M8 saddle nut 2141906          1x M8 nut 2184504</p> <p>Eyebolt combo          1x eyebolt and lock          Kit MW-EB M8 L 2.0/1m 2280044          Kit MW-EB M8 L 2.0/2m 2280045          Kit MW-EB M8 L 2.0/3m 2280046          Kit MW-EB M8 L 2.0/5m 2280047          Kit MW-EB M8 L 2.0/10m 2280048</p>	<p>2d</p>	<p><b>2d</b> Centric fixation of MQ System channel, 5.0 wire</p> <p>2x MQT-21-41 beam clamp 369675          1x MQ-41 3m ...m channel 369591          1x MQA-S-M10 saddle nut 2141907          1x M10 nut 2184505</p> <p>Eyebolt combo          1x the same combos as</p> <p>2d → 1d</p>
<p>1c</p>	<p><b>1c</b> Centric fixation of MQ System channel, 3.0 wire</p> <p>2x MQT-U beam clamp 2115454          1x MQ-41 3m channel 369591          1x MQA-S-M8 saddle nut 2141906          1x M8 nut 2184504</p> <p>Eyebolt combo          1x eyebolt and lock          Kit MW-EB M8 L 3.0/1m 2280049          Kit MW-EB M8 L 3.0/2m 2280050          Kit MW-EB M8 L 3.0/3m 2280051          Kit MW-EB M8 L 3.0/5m 2280052          Kit MW-EB M8 L 3.0/10m 2280053</p>	<p><b>Beam clamp fixing for bottom of the channel</b></p> <p>1a 1.5 wire          1b 2.0 wire          1c 3.0 wire          1d 5.0 wire</p> <p><b>Beam clamp fixing around the channel</b></p> <p>2a 1.5 wire          2b 2.0 wire          2c 3.0 wire          2d 5.0 wire</p>	
<p>1d</p>	<p><b>1d</b> Centric fixation of MQ System channel, 5.0 wire</p> <p>2x MQT-U beam clamp 2115454          1x MQ-41 3m channel 369591          1x MQA-S-M10 saddle nut 2141907          1x M10 nut 2184505</p> <p>Eyebolt combo          1x eyebolt and lock          Kit MW-EB M10 L 5.0/1m 2280054          Kit MW-EB M10 L 5.0/2m 2280055          Kit MW-EB M10 L 5.0/3m 2280056          Kit MW-EB M10 L 5.0/5m 2280057          Kit MW-EB M10 L 5.0/10m 2280058</p>		

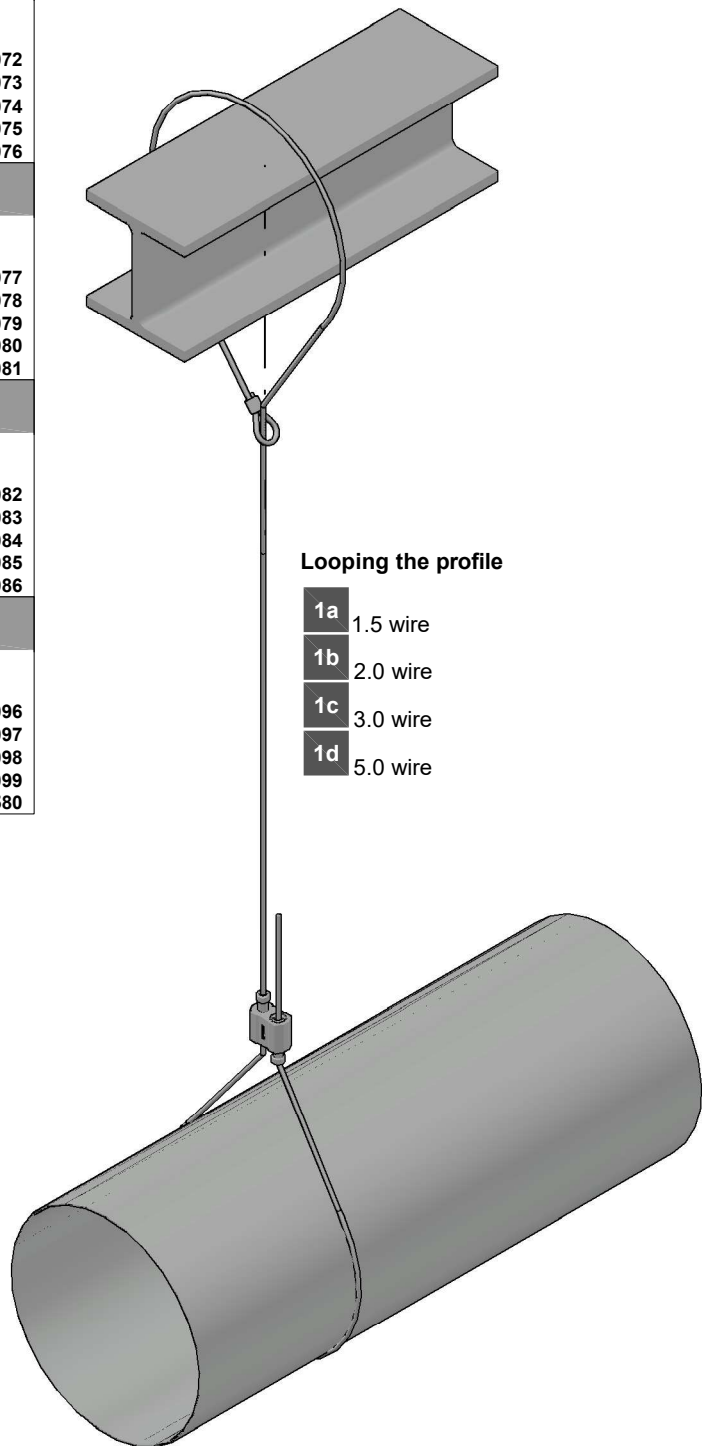
Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Steel - MQ System	 1	Wire system	Steel
General comments		MM System	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>			

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# Ventilation - Single Fastening Point Fixed On Structural Steel - Looping The Profile:

<b>1a</b>		<b>1a</b> Looping the profile with 1.5 wire <b>Loop combo</b> <b>1x loop and lock</b> Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076
<b>1b</b>		<b>1b</b> Looping the profile with 2.0 wire <b>Loop combo</b> <b>1x loop and lock</b> Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081
<b>1c</b>		<b>1c</b> Looping the profile with 3.0 wire <b>Loop combo</b> <b>1x loop and lock</b> Kit MW-LP L 3.0/1m 2280082 Kit MW-LP L 3.0/2m 2280083 Kit MW-LP L 3.0/3m 2280084 Kit MW-LP L 3.0/5m 2280085 Kit MW-LP L 3.0/10m 2280086
<b>1d</b>		<b>1d</b> Looping the profile with 5.0 wire <b>Loop combo</b> <b>1x loop and lock</b> Kit MW-LP L 5.0/1m 2287096 Kit MW-LP L 5.0/2m 2287097 Kit MW-LP L 5.0/3m 2287098 Kit MW-LP L 5.0/5m 2287099 Kit MW-LP L 5.0/10m 2287580





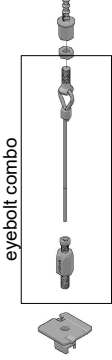
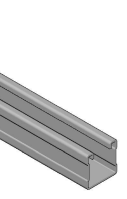
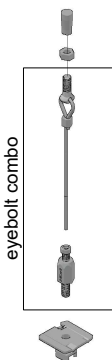
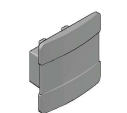

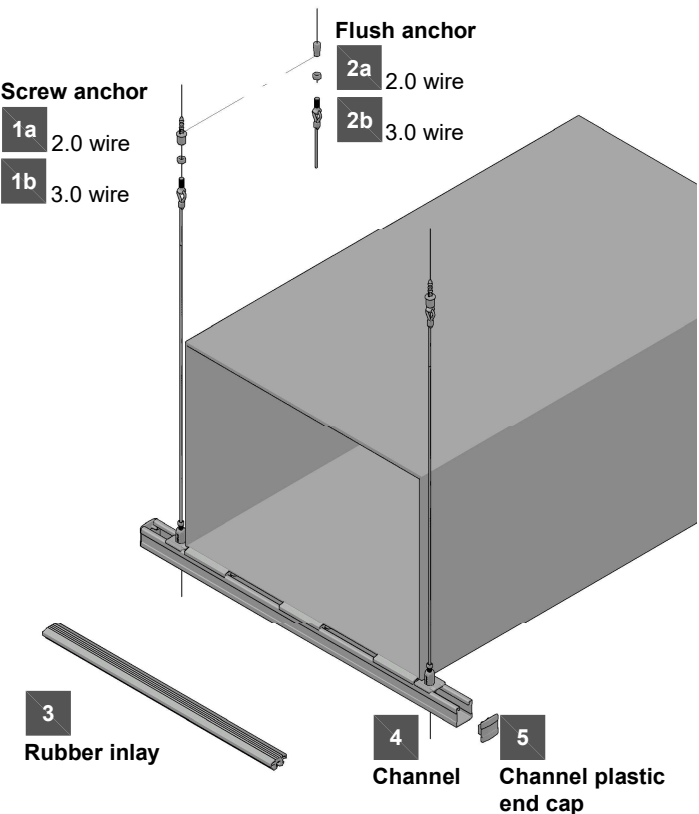
Looping the profile

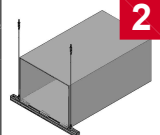
- 1a** 1.5 wire
- 1b** 2.0 wire
- 1c** 3.0 wire
- 1d** 5.0 wire

Application description	Application	Product lines	Base material
Wire system - Ventilation - Single Fastening Point On Steel - Looping the profile	<b>1</b>	Wire system	Steel
<b>General comments</b>			
<ul style="list-style-type: none"> <li>• Loading must always be compared with the capacity of the structural steel</li> <li>• Sharp edges must be avoided to prevent damage to the wire</li> </ul>			

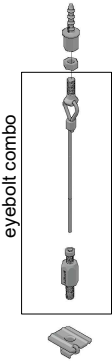
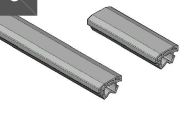
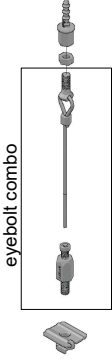
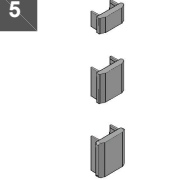
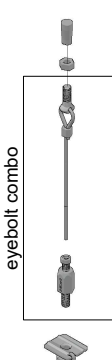
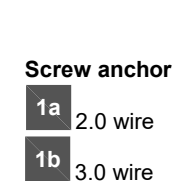
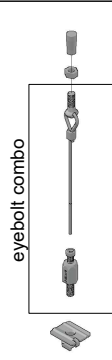
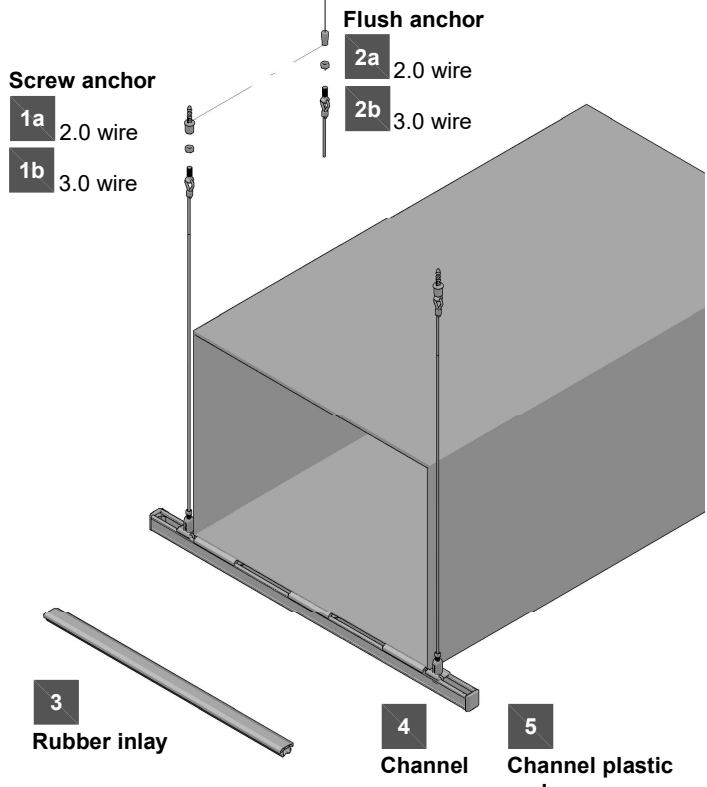
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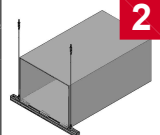
# Ventilation - Trapeze Fixed On Concrete Slab - MQ System:

<p><b>1a</b></p>  <p>eyebolt combo</p>	<p><b>1a</b> Screw anchor, M8 support 2.0 wire</p> <p>1x Screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066</p> <p>Connection to channel</p> <p>1x saddle nut MQA-S-M8 saddle nut 2141906</p>	<p><b>3</b></p> 	<p><b>3</b> Channel rubber inlay for sound insulation</p> <p>100mm pcs</p> <p>1x MQZ-RI 10cm rubber inlay 2047317</p> <p>20m roll</p> <p>1x MQZ-RI 20m rubber inlay 2047316</p>
<p><b>1b</b></p>  <p>eyebolt combo</p>	<p><b>1b</b> Screw anchor, M8 support 3.0 wire</p> <p>1x Screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071</p> <p>Connection to channel</p> <p>1x saddle nut MQA-S-M8 saddle nut 2141906</p>	<p><b>4</b></p> 	<p><b>4</b> Channels</p> <p>21mm channel</p> <p>MQ-21.5 2m channel 2184771 MQ-21.5 3m channel 2184772 MQ-21.5 6m channel 2184773</p> <p>41mm channel</p> <p>MQ-41-L 2m channel 2155538 MQ-41-L 3m channel 2155536</p> <p>MQ-41 2m channel 304559 MQ-41 3m channel 369591 MQ-41 6m channel 369592</p> <p>For more sizes check <a href="http://www.hilti.com">www.hilti.com</a></p>
<p><b>2a</b></p>  <p>eyebolt combo</p>	<p><b>2a</b> Flush (drop-in) anchor, M8 support 2.0 wire</p> <p>1x flush anchor HKD M8x25 anchor 416740 HKD M8x30 anchor 376959 HKD M8x40 anchor 376961</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066</p> <p>Connection to channel</p> <p>1x saddle nut MQA-S-M8 saddle nut 2141906</p>	<p><b>5</b></p> 	<p><b>5</b> Channel plastic end caps</p> <p>for channel 21mm</p> <p>MQZ-E21 plastic end cap 370598</p> <p>for channel 41mm</p> <p>MQZ-E41 plastic end cap 369685</p>
<p><b>2b</b></p>  <p>eyebolt combo</p>	<p><b>2b</b> Flush (drop-in) anchor, M8 support 3.0 wire</p> <p>1x flush anchor HKD M8x25 anchor 376957 HKD M8x30 anchor 376959 HKD M8x40 anchor 376961</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071</p> <p>Connection to channel</p> <p>1x saddle nut MQA-S-M8 saddle nut 2141906</p>	 <p><b>3</b> Rubber inlay</p> <p><b>4</b> Channel</p> <p><b>5</b> Channel plastic end cap</p>	

Application description	Application	Product lines	Base material
Wire system - Ventilation - Trapeze On Concrete	 <p><b>2</b></p>	Wire system	Concrete
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the anchor within the chosen base material</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MQ System	

# Ventilation - Trapeze Fixed On Concrete Slab - MM System:

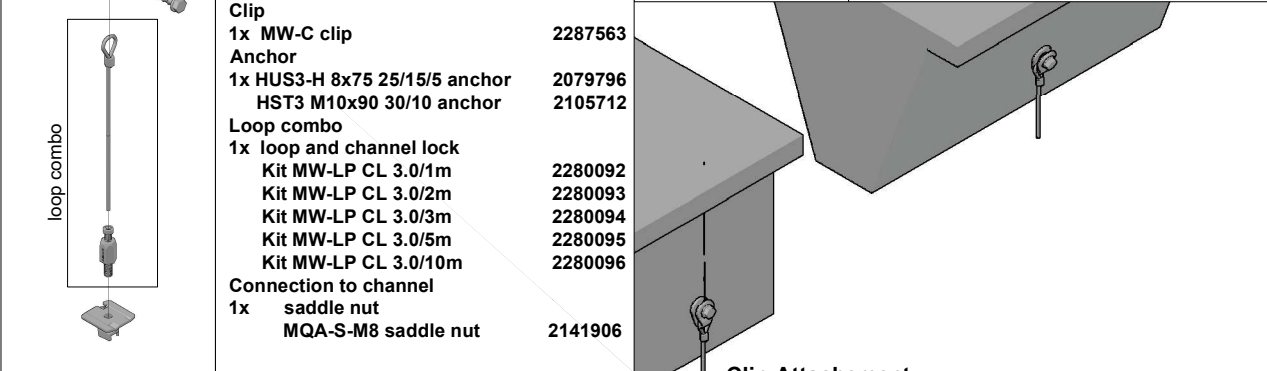
<p><b>1a</b></p>  <p>eyebolt combo</p>	<p><b>1a</b> Screw Anchor, M8 Support 2.0 wire</p> <p>1x Screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066</p> <p>Connection to channel</p> <p>1x saddle nut MM-S-M8 saddle nut 418760</p>	<p><b>3</b></p> 	<p><b>3</b> MM System Channel Rubber Inlay For Sound Insulation</p> <p>100mm pcs</p> <p>1x MM-RI 10cm rubber inlay 418768</p> <p>20m roll</p> <p>1x MM-RI 20m rubber inlay 418767</p>
<p><b>1b</b></p>  <p>eyebolt combo</p>	<p><b>1b</b> Screw Anchor, M8 Support 3.0 wire</p> <p>1x Screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071</p> <p>Connection to channel</p> <p>1x saddle nut MM-S-M8 saddle nut 418760</p>	<p><b>4</b></p> 	<p><b>4</b> MM System Channels</p> <p>16mm channel MM-C-16 channel 418748</p> <p>30mm channel MM-C-30 418749</p> <p>36mm channel MM-C-36 418750</p> <p>For more sizes check <a href="http://www.hilti.com">www.hilti.com</a></p>
<p><b>2a</b></p>  <p>eyebolt combo</p>	<p><b>2a</b> Flush Anchor, M8 Support 2.0 wire</p> <p>1x flush anchor HKD M8x25 anchor 416740 HKD M8x30 anchor 376959 HKD M8x40 anchor 376961</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066</p> <p>Connection to channel</p> <p>1x saddle nut MM-S-M8 saddle nut 418760</p>	<p><b>5</b></p> 	<p><b>5</b> MM System Channel Plastic End Caps</p> <p>for 16mm channel MM-E-16 plastic end cap 418773</p> <p>for 30mm channel MM-E-30 plastic end cap 418774</p> <p>for 36mm channel MM-E-36 plastic end cap 418775</p>
<p><b>2b</b></p>  <p>eyebolt combo</p>	<p><b>2b</b> Flush Anchor, M8 Support 3.0 wire</p> <p>1x flush anchor HKD M8x25 anchor 376957 HKD M8x30 anchor 376959 HKD M8x40 anchor 376961</p> <p>1x M8 nut 2184504</p> <p>Eyebolt combo</p> <p>1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071</p> <p>Connection to channel</p> <p>1x saddle nut MM-S-M8 saddle nut 418760</p>	 <p><b>1a</b> 2.0 wire</p> <p><b>1b</b> 3.0 wire</p> <p><b>2a</b> 2.0 wire</p> <p><b>2b</b> 3.0 wire</p> <p><b>3</b> Rubber inlay</p> <p><b>4</b> Channel</p> <p><b>5</b> Channel plastic end cap</p>	

Application description	Application	Product lines	Base material
Wire system - Ventilation Trapeze On Concrete - MM System	 <b>2</b>	Wire system	Concrete
<b>General comments</b>		MM System	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the anchor within the chosen base material</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>			



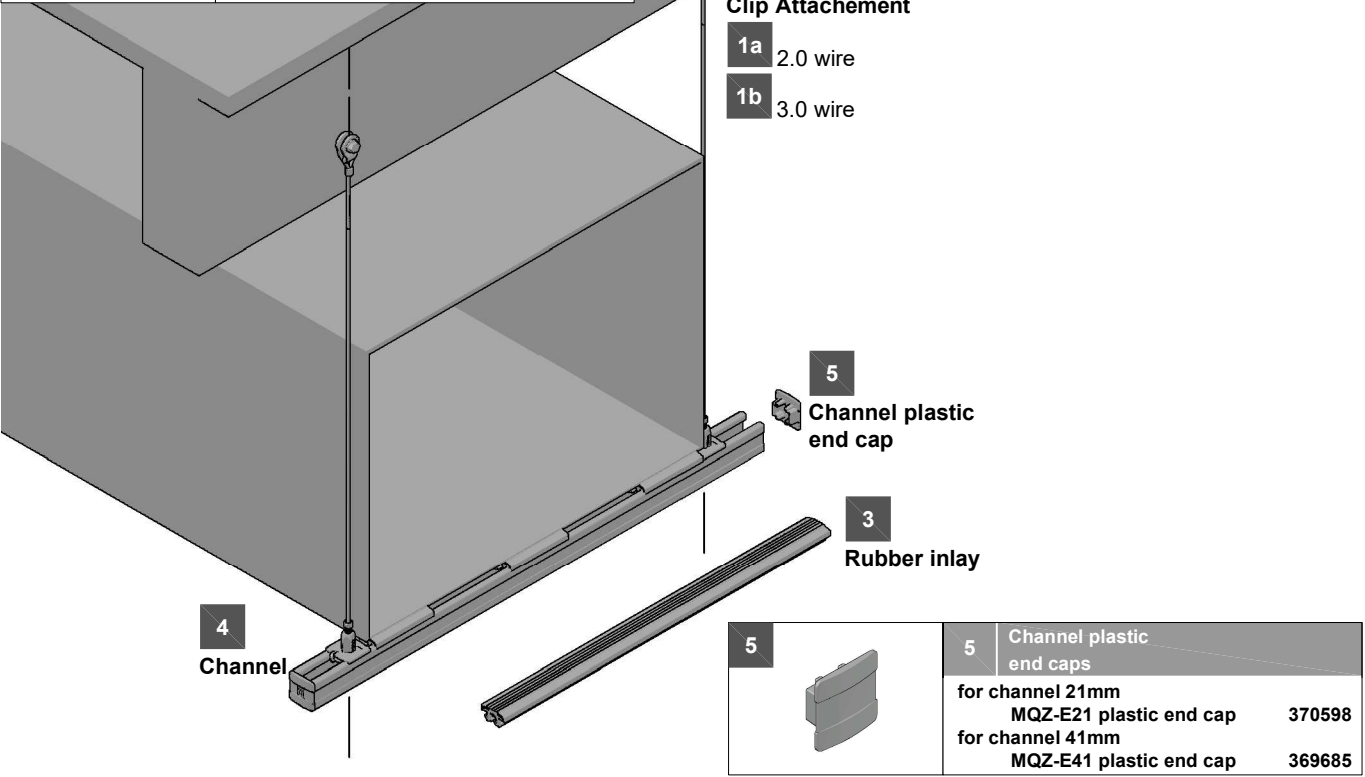
# Ventilation - Trapeze Fixed On A Side Of A Concrete Girder:

	<b>1a</b> Clip attachment 2.0 wire		<b>3</b> Channel rubber inlay for sound insulation
	<b>Clip</b> 1x MW-C 2287563 Anchor 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712 <b>Loop combo</b> 1x loop and channel lock Kit MW-LP CL 2.0/1m 2280087 Kit MW-LP CL 2.0/2m 2280088 Kit MW-LP CL 2.0/3m 2280089 Kit MW-LP CL 2.0/5m 2280090 Kit MW-LP CL 2.0/10m 2280091 <b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906		100mm pcs 1x MQZ-RI 10cm rubber inlay 2047317 20m roll 1x MQZ-RI 20m rubber inlay 2047316
	<b>1b</b> Clip attachment 3.0 wire		<b>4</b> Channels
	<b>Clip</b> 1x MW-C clip 2287563 Anchor 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712 <b>Loop combo</b> 1x loop and channel lock Kit MW-LP CL 3.0/1m 2280092 Kit MW-LP CL 3.0/2m 2280093 Kit MW-LP CL 3.0/3m 2280094 Kit MW-LP CL 3.0/5m 2280095 Kit MW-LP CL 3.0/10m 2280096 <b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906		21mm channel MQ-21.5 2m channel 2184771 MQ-21.5 3m channel 2184772 MQ-21.5 6m channel 2184773 41mm channel MQ-41-L 2m channel 2155538 MQ-41-L 3m channel 2155536 MQ-41 2m channel 304559 MQ-41 3m channel 369591 MQ-41 6m channel 369592 For more sizes check <a href="http://www.hilti.com">www.hilti.com</a>



### Clip Attachement

- 1a** 2.0 wire
- 1b** 3.0 wire

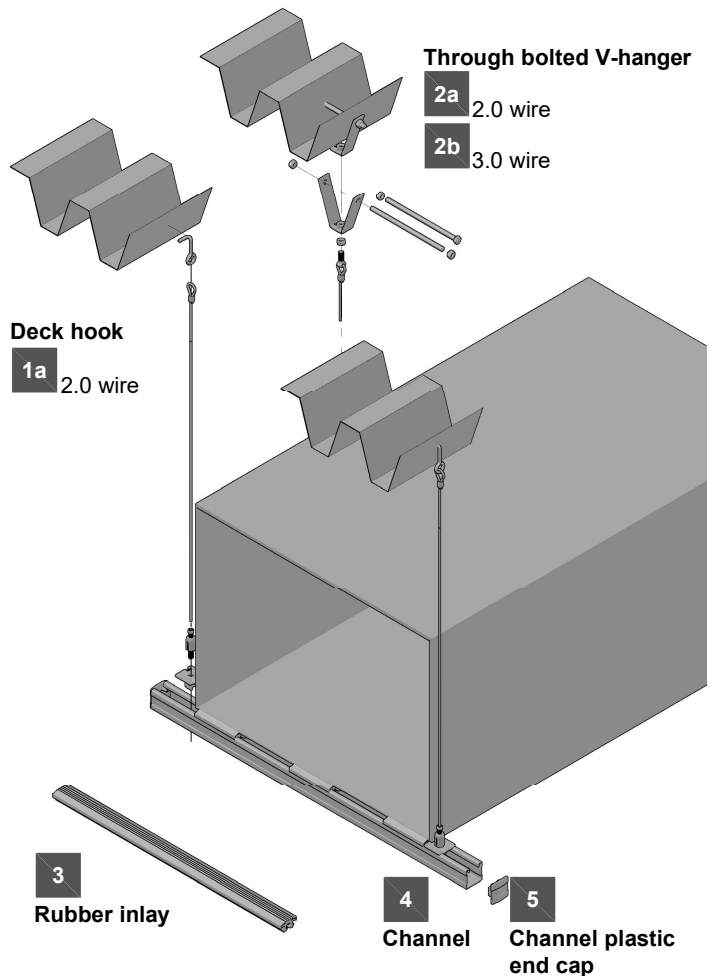


	<b>5</b> Channel plastic end caps
	for channel 21mm MQZ-E21 plastic end cap 370598 for channel 41mm MQZ-E41 plastic end cap 369685

Application description	Application	Product lines	Base material
Wire system - Ventilation - Trapeze On A Side Of A Concrete Girder		Wire system	Concrete
<b>General comments</b> <ul style="list-style-type: none"> <li>• Loading must always be compared with the capacity with the capacity of the anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor</li> <li>• Only one wire may be suspended vertically on each clip</li> </ul>		MQ System	

# Ventilation - Trapeze Fixed On Metal Deck:

<p>loop combo</p>	<p><b>1a</b> Deck hook 2.0 wire</p> <p><b>Deck hook</b> 1x MW-DH deck hook 2277567</p> <p><b>Loop combo</b> 1x loop and channel lock</p> <p>Kit MW-LP CL 2.0/1m 2280087 Kit MW-LP CL 2.0/2m 2280088 Kit MW-LP CL 2.0/3m 2280089 Kit MW-LP CL 2.0/5m 2280090 Kit MW-LP CL 2.0/10m 2280091</p> <p><b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906</p>	<p><b>4</b></p>	<p><b>4</b> MQ System channel</p> <p>21mm channel MQ-21.5 2m channel 2184771 MQ-21.5 3m channel 2184772 MQ-21.5 6m channel 2184773</p> <p>41mm channel MQ-41-L 2m channel 2155538 MQ-41-L 3m channel 2155536</p> <p>MQ-41 2m channel 304559 MQ-41 3m channel 369591 MQ-41 6m channel 369592</p> <p>For more sizes check <a href="http://www.hilti.com">www.hilti.com</a></p>
<p>eyebolt combo</p>	<p><b>2a</b> Through bolted V-hanger 2.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 2184504</p> <p><b>Through-bolt version 1 t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b> 1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066</p> <p><b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906</p>	<p><b>5</b></p>	<p><b>5</b> Channel plastic end caps</p> <p>for channel 21mm MQZ-E21 plastic end cap 370598</p> <p>for channel 41mm MQZ-E41 plastic end cap 369685</p>
<p>eyebolt combo</p>	<p><b>2b</b> Through bolted V-hanger 3.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 2184504</p> <p><b>Through-bolt version 1 t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt version 2 long h-head screw</b> 1x M8x120 4.8 h-head screw 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b> 1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071</p> <p><b>Connection to channel</b> 1x MQA-S-M8 saddle nut 2141906</p>	<p><b>Deck hook</b> <b>1a</b> 2.0 wire</p>	<p><b>Through bolted V-hanger</b> <b>2a</b> 2.0 wire <b>2b</b> 3.0 wire</p>
<p><b>3</b></p>	<p><b>3</b> Channel rubber inlay for sound insulation</p> <p>100mm pcs 1x MQZ-RI 10cm rubber inlay 2047317 20m roll 1x MQZ-RI 20m rubber inlay 2047316</p>	<p><b>3</b></p>	<p><b>4</b> Channel</p> <p><b>5</b> Channel plastic end cap</p>



Application description	Application	Product lines	Base material
Wire system - Ventilation - Trapeze On Concrete	<b>2</b>	Wire system	Metal deck
<b>General comments</b>		MQ System	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and where relevant the V-hanger.</li> <li>The deck hook or eyebolt must hang vertically from the deck.</li> <li>Only one wire may be suspended on each deck hook.</li> </ul>			

# Ventilation - Trapeze Fixed On Metal Deck:

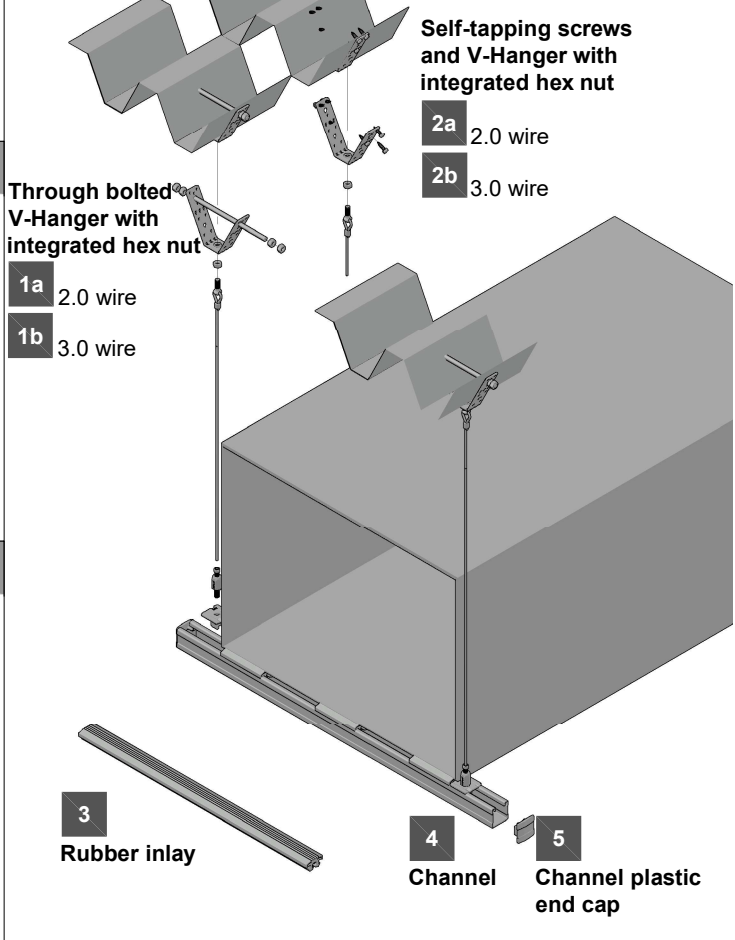
	<b>1a</b>	Through bolted V-Hanger with integrated hex nut, 2.0 wire
	<b>V-Hanger</b>	
	1x MVA-MS M8 V-hanger	386558
	1x M8 nut	216465
	<b>Through-bolt version 1-t-rod</b>	
	1x AM8x1000 fixed t-rod	339793
	4x M8 nut	216465
	<b>Eyebolt combo</b>	
	1x eyebolt and channel lock	
	Kit MW-EB M8 CL 2.0/1m	2280062

	<b>1b</b>	Through bolted V-Hanger with integrated hex nut, 3.0 wire
	<b>V-Hanger</b>	
	1x MVA-MS M8 V-hanger	386558
	1x M8 nut	216465
	<b>Through-bolt version 1-t-rod</b>	
	1x AM8x1000 fixed t-rod	339793
	4x M8 nut	216465
	<b>Eyebolt combo</b>	
	1x eyebolt and channel lock	
	Kit MW-EB M8 CL 3.0/1m	2280067

	<b>2a</b>	Self-tapping screws and V-Hanger with integrated hex nut, 2.0 wire
	<b>V-Hanger</b>	
	1x MVA-MS M8 V-hanger	386558
	1x M8 nut	216465
	<b>Self-tapping screws</b>	
	6x S-MS 01Z 4.0x13 S-screw	406471
	<b>Eyebolt combo</b>	
	1x eyebolt and channel lock	
	Kit MW-EB M8 CL 2.0/1m	2280062
	Kit MW-EB M8 CL 2.0/2m	2280063

	<b>2b</b>	Self-tapping screws and V-Hanger with integrated hex nut, 2.0 wire
	<b>V-Hanger</b>	
	1x MVA-MS M8 V-hanger	386558
	1x M8 nut	216465
	<b>Self-tapping screws</b>	
	6x S-MS 01Z 4.0x13 S-screw	406471
	<b>Eyebolt combo</b>	
	1x eyebolt and channel lock	
	Kit MW-EB M8 CL 3.0/1m	2280067
	Kit MW-EB M8 CL 3.0/2m	2280068

	<b>3</b>	Channel rubber inlay for sound insulation
	100mm pcs	
	1x MQZ-RI 10cm rubber inlay	2047317
	<b>4</b>	Channels
	21mm channel	
	MQ-21.5 2m channel	2184771
	<b>5</b>	Channel plastic end caps
	for channel 21mm	
	MQZ-E21 plastic end cap	370598

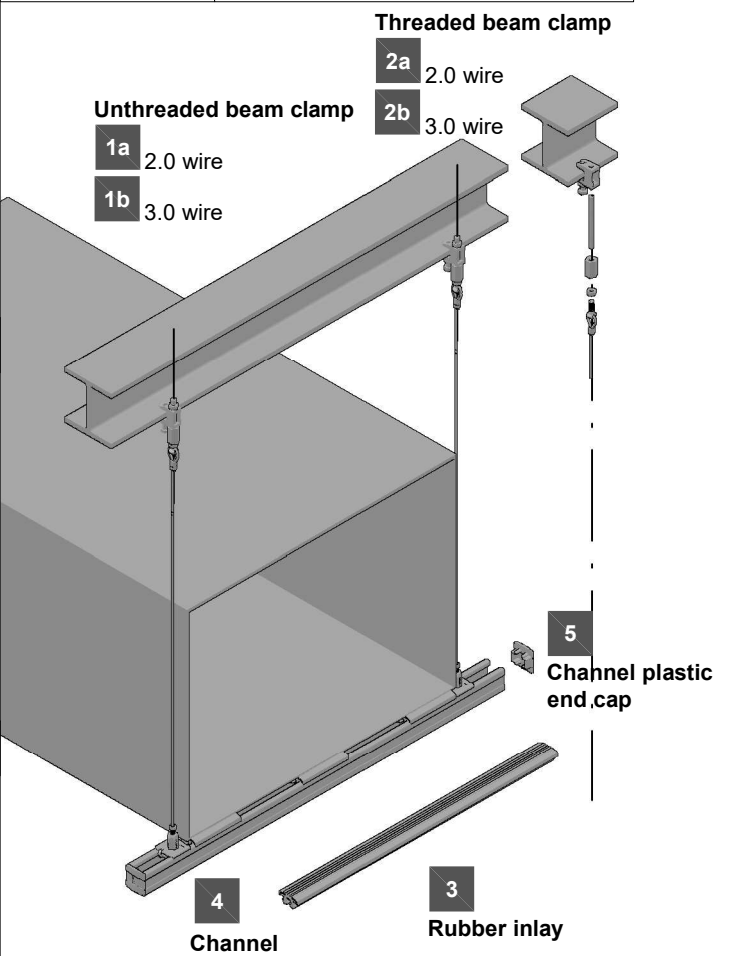


Application description	Application	Product lines	Base material
Wire system - Ventilation - Trapeze On Concrete		Wire system	Metal deck
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and V-hanger</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MQ System	

# Ventilation - Trapeze Fixed On A Structural Steel Profiles Using Beam Clamps:

	<b>1a</b> Unthreaded beam clamp 2.0 wire	<b>3</b> Channel rubber inlay for sound insulation
	<b>Beam clamp</b> 1x MAB-9 beam clamp 375956 2x M8 nut 2184504 1x M8x1000 4.8 threaded rod 2140926 1x M8x25 coupler 216703 <b>Eyebolt combo</b> 1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066 <b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906	<b>100mm pcs</b> 1x MQZ-RI 10cm rubber inlay 2047317 20m roll 1x MQZ-RI 20m rubber inlay 2047316
	<b>1b</b> Unthreaded beam clamp 3.0 wire	<b>4</b> Channels
	<b>Beam clamp</b> 1x MAB-9 beam clamp 375956 2x M8 nut 2184504 1x M8x1000 4.8 threaded rod 2140926 1x M8x25 coupler 216703 <b>Eyebolt combo</b> 1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071 <b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906	<b>21mm channel</b> MQ-21.5 2m channel 2184771 MQ-21.5 3m channel 2184772 MQ-21.5 6m channel 2184773 <b>41mm channel</b> MQ-41-L 2m channel 2155538 MQ-41-L 3m channel 2155536  MQ-41 2m channel 304559 MQ-41 3m channel 369591 MQ-41 6m channel 369592 For more sizes check <a href="http://www.hilti.com">www.hilti.com</a>

	<b>2a</b> Threaded beam clamp 2.0 wire
	<b>Beam clamp</b> 1x MAB-M8 beam clamp 2006878 1x M8x1000 4.8 threaded rod 2140926 1x M8x25 coupler 216703 2x M8 nut 2184504 <b>Eyebolt combo</b> 1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066 <b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906
	<b>2b</b> Threaded beam clamp 3.0 wire
	<b>Beam clamp</b> 1x MAB-M8 beam clamp 2006878 1x M8x1000 4.8 threaded rod 2140926 1x M8x25 coupler 216703 2x M8 nut 2184504 <b>Eyebolt combo</b> 1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071 <b>Connection to channel</b> 1x saddle nut MQA-S-M8 saddle nut 2141906



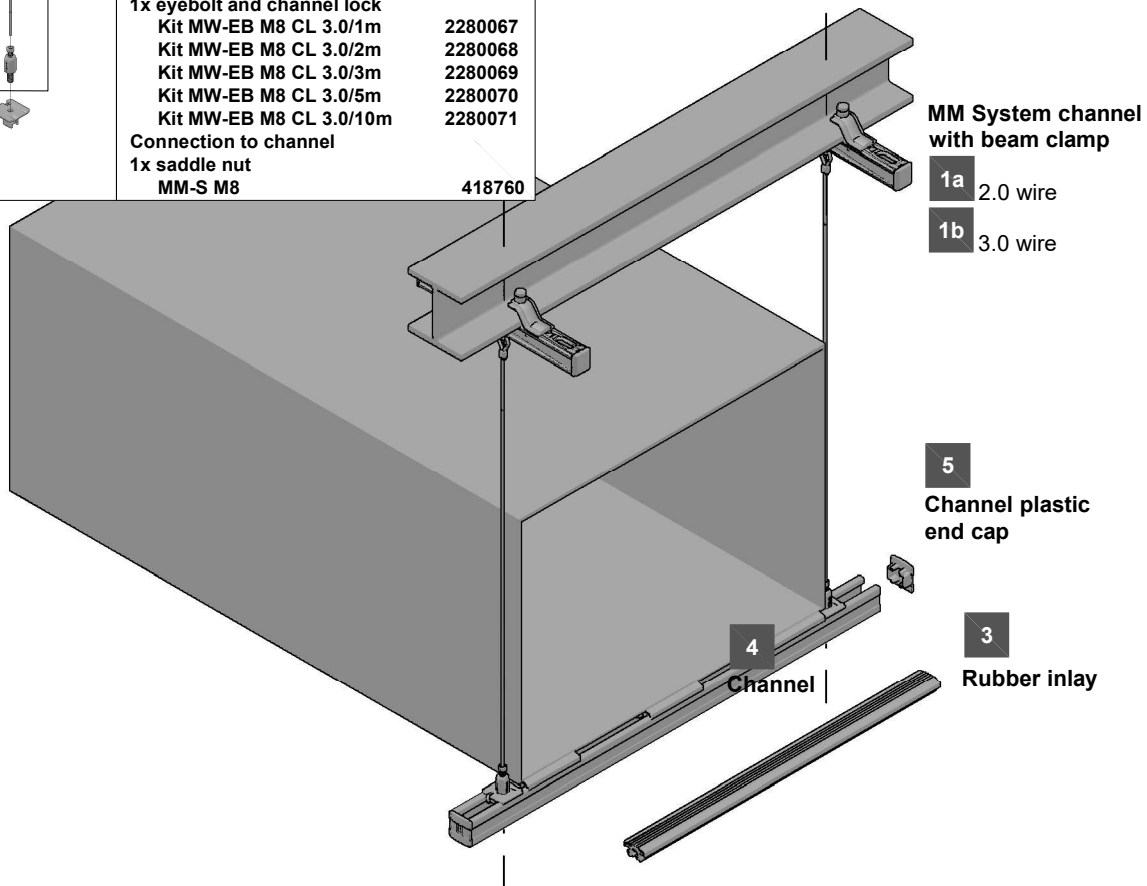
	<b>5</b> Channel plastic end caps
	for channel 21mm MQZ-E21 plastic end cap 370598 for channel 41mm MQZ-E41 plastic end cap 369685

Application description	Application	Product lines	Base material
Wire system - Ventilation - Trapeze On Structural Steel Profiles - Beam Clamps		Wire system	Steel
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the beam clamp and structural steel</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MQ System	



# Ventilation - Trapeze Fixed On A Structural Steel Profiles - Centric solution using MM Channel System:

<p><b>1a</b></p>	<p><b>1a</b> Centric fixation of MM System channel, 2.0 wire</p> <p>Clamps 2x MM-T-16-36 418763</p> <p>Channel e.g. 1x MM-C-30 2m .....m 418749</p> <p>Saddle nut 1x MM-S M8 418760</p> <p>Nut 1x M8 nut 216465</p> <p>Eyebolt combo 1x eyebolt and channel lock Kit MW-EB M8 CL 2.0/1m 2280062 Kit MW-EB M8 CL 2.0/2m 2280063 Kit MW-EB M8 CL 2.0/3m 2280064 Kit MW-EB M8 CL 2.0/5m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066</p> <p>Connection to channel 1x saddle nut MM-S M8 418760</p>	<p><b>3</b></p>	<p><b>3</b> Channel rubber inlay for sound insulation</p> <p>100mm pcs 1x MM-RI 10cm rubber inlay 418768</p> <p>20m roll 1x MM-RI 20m rubber inlay 418767</p>
<p><b>1b</b></p>	<p><b>1b</b> Centric fixation of MM System channel, 3.0 wire</p> <p>Clamps 2x MM-T-16-36 418763</p> <p>Channel e.g. 1x MM-C-30 2m .....m 418749</p> <p>Saddle nut 1x MM-S M8 418760</p> <p>Nut 1x M8 nut 216465</p> <p>Eyebolt combo 1x eyebolt and channel lock Kit MW-EB M8 CL 3.0/1m 2280067 Kit MW-EB M8 CL 3.0/2m 2280068 Kit MW-EB M8 CL 3.0/3m 2280069 Kit MW-EB M8 CL 3.0/5m 2280070 Kit MW-EB M8 CL 3.0/10m 2280071</p> <p>Connection to channel 1x saddle nut MM-S M8 418760</p>	<p><b>4</b></p>	<p><b>4</b> MM System channels</p> <p>16mm channel MM-C-16 2m channel 418748</p> <p>30mm channel MM-C-30 2m channel 418749</p> <p>36mm channel MM-C-36 2m M10 channel 418750 MM-C-36 3m M10 channel 418751</p> <p>For more sizes check <a href="http://www.hilti.com">www.hilti.com</a></p>
		<p><b>5</b></p>	<p><b>5</b> MM System channel plastic end caps</p> <p>for channel 16mm MM-E-16 plastic end cap 418773</p> <p>for channel 30mm MM-E-30 plastic end cap 418774</p> <p>for channel 36mm MM-E-36 plastic end cap 418775</p>

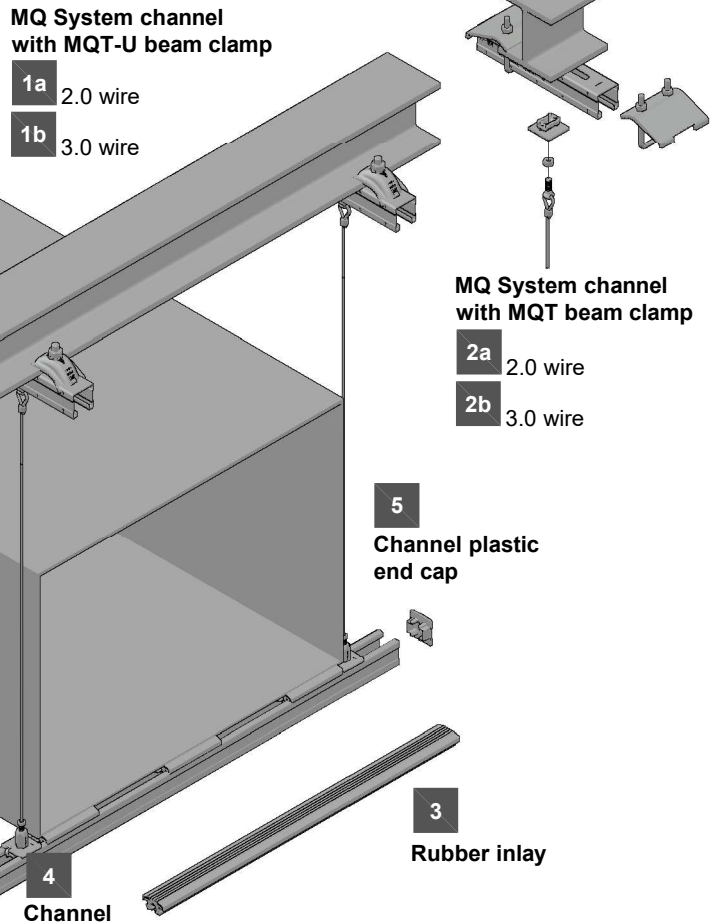


Application description	Application	Product lines	Base material
Wire system - Ventilation Trapeze On Structural Steel - MM System Channels	<b>2</b>	Wire system	Steel
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MQ System	

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# Ventilation Trapeze Fixed On A Structural Steel Profiles - Centric solution using MQ Channel System:


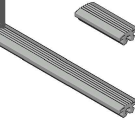

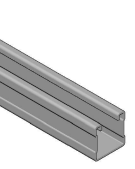
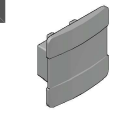
	<b>1a</b> Centric fixation of MQ System channel, 2.0 wire	2x MQT-U beam clamp 2115454 1x MQ-41 3m channel 369591 1x MQA-S-M8 saddle nut 2141906 1x M8 nut 2184504 Eyebolt combo 1x eyebolt and channel lock 2280062 Kit MW-EB M8 CL 2.0/1m 2280063 Kit MW-EB M8 CL 2.0/2m 2280064 Kit MW-EB M8 CL 2.0/3m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066 Connection to channel 1x saddle nut 2141906 MQA-S-M8 saddle nut 2141906		<b>3</b> Channel rubber inlay for sound insulation 100mm pcs 1x MQZ-RI 10cm rubber inlay 2047317 20m roll 1x MQZ-RI 20m rubber inlay 2047316
		<b>1b</b> Centric fixation of MQ System channel, 3.0 wire		2x MQT-U beam clamp 2115454 1x MQ-41 3m channel 369591 1x MQA-S-M8 saddle nut 2141906 1x M8 nut 2184504 Eyebolt combo 1x eyebolt and channel lock 2280067 Kit MW-EB M8 CL 3.0/1m 2280068 Kit MW-EB M8 CL 3.0/2m 2280069 Kit MW-EB M8 CL 3.0/3m 2280070 Kit MW-EB M8 CL 3.0/5m 2280071 Kit MW-EB M8 CL 3.0/10m 2280071 Connection to channel 1x saddle nut 2141906 MQA-S-M8 saddle nut 2141906
		<b>2a</b> Centric fixation of MQ System channel, 2.0 wire	2x MQT-21-41 beam clamp 369675 1x MQ-41 3m ...m channel 369591 1x MQA-S-M8 saddle nut 2141906 1x M8 nut 2184504 Eyebolt combo 1x eyebolt and channel lock 2280062 Kit MW-EB M8 CL 2.0/1m 2280063 Kit MW-EB M8 CL 2.0/2m 2280064 Kit MW-EB M8 CL 2.0/3m 2280065 Kit MW-EB M8 CL 2.0/10m 2280066 Connection to channel 1x saddle nut 2141906 MQA-S-M8 saddle nut 2141906	
	<b>2b</b> Centric fixation of MQ System channel, 3.0 wire	2x MQT-21-41 beam clamp 369675 1x MQ-41 3m ...m channel 369591 1x MQA-S-M8 saddle nut 2141906 1x M8 nut 2184504 Eyebolt combo 1x eyebolt and channel lock 2280067 Kit MW-EB M8 CL 3.0/1m 2280068 Kit MW-EB M8 CL 3.0/2m 2280069 Kit MW-EB M8 CL 3.0/3m 2280070 Kit MW-EB M8 CL 3.0/5m 2280071 Kit MW-EB M8 CL 3.0/10m 2280071 Connection to channel 1x saddle nut 2141906 MQA-S-M8 saddle nut 2141906	for channel 21mm MQZ-E21 plastic end cap 370598 for channel 41mm MQZ-E41 plastic end cap 369685	

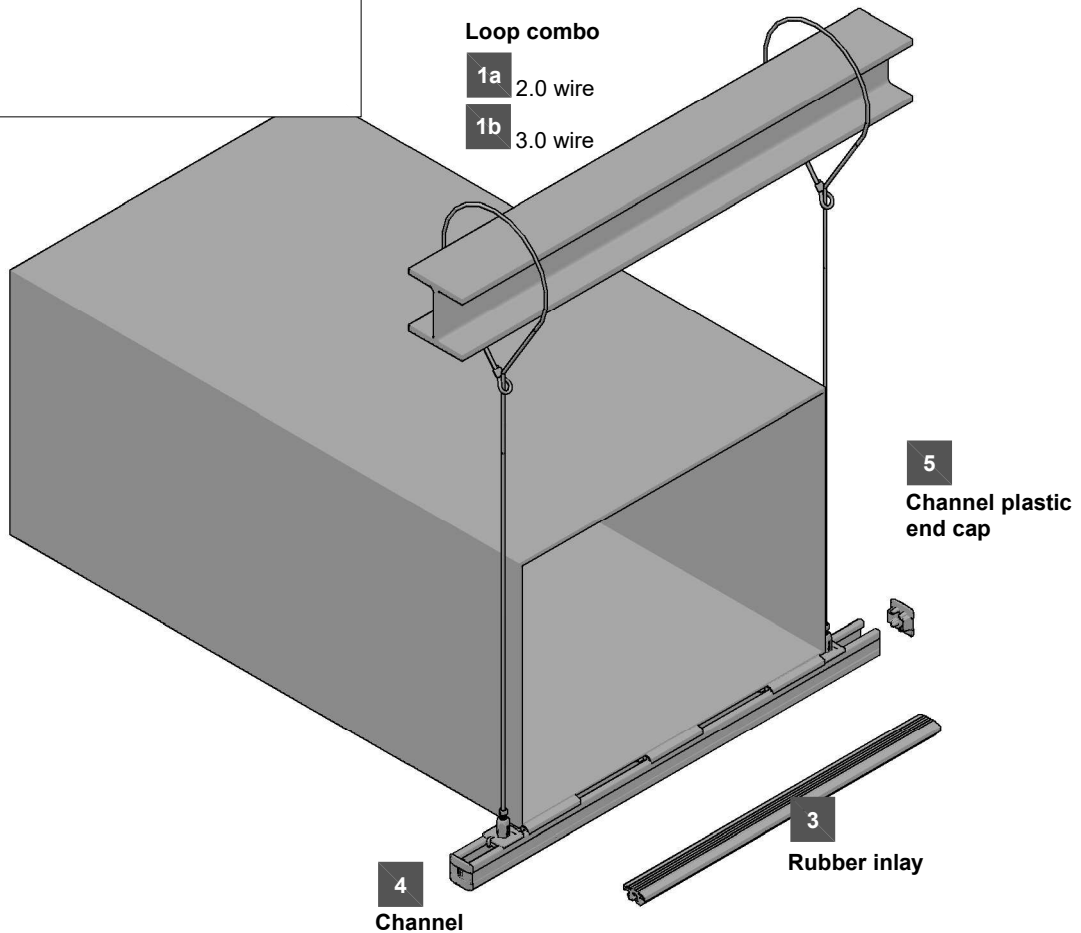


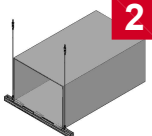
Application description	Application	Product lines	Base material
Wire system - Ventilation - Trapeze On Structural Steel - MQ System Channels		2 Wire system	Steel
General comments		MQ System	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>			

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# Ventilation - Trapeze Fixed Looped Around Structural Steel Profiles

<p><b>1a</b></p>  <p>loop combo</p>	<p><b>1a</b> Looping the profile with 2.0 wire</p> <p><b>Loop combo</b>  <b>1x</b> loop and channel lock          Kit MW-LP CL 2.0/1m 2280087          Kit MW-LP CL 2.0/2m 2280088          Kit MW-LP CL 2.0/3m 2280089          Kit MW-LP CL 2.0/5m 2280090          Kit MW-LP CL 2.0/10m 2280091</p> <p><b>Connection to channel</b>  <b>1x</b> saddle nut          MQA-S-M8 saddle nut 2141906</p>	<p><b>3</b></p> 	<p><b>3</b> Channel rubber inlay for sound insulation</p> <p>100mm pcs  <b>1x</b> MQZ-RI 10cm rubber inlay 2047317          20m roll  <b>1x</b> MQZ-RI 20m rubber inlay 2047316</p>
<p><b>1b</b></p>  <p>loop combo</p>	<p><b>1b</b> Looping the profile with 3.0 wire</p> <p><b>Loop combo</b>  <b>1x</b> loop and channel lock          Kit MW-LP CL 3.0/1m 2280092          Kit MW-LP CL 3.0/2m 2280093          Kit MW-LP CL 3.0/3m 2280094          Kit MW-LP CL 3.0/5m 2280095          Kit MW-LP CL 3.0/10m 2280096</p> <p><b>Connection to channel</b>  <b>1x</b> saddle nut          MQA-S-M8 saddle nut 2141906</p>	<p><b>4</b></p> 	<p><b>4</b> MQ System channels</p> <p><b>21.5mm channel</b>          MQ-21.5 2m channel 2184771          MQ-21.5 3m channel 2184772          MQ-21.5 6m channel 2184773</p> <p><b>41mm channel</b>          MQ-41-L 2m channel 2141966          MQ-41-L 3m channel 2141965          MQ-41-L 6m channel 2141964          MQ-41 2m channel 304559          MQ-41 3m channel 369591          MQ-41 6m channel 369592</p> <p>For more sizes check <a href="http://www.hilti.com">www.hilti.com</a></p>
		<p><b>5</b></p> 	<p><b>5</b> MQ System channel plastic end caps</p> <p>for channel 21mm          MQZ-E21 plastic end cap 370598</p> <p>for channel 41mm          MQZ-E41 plastic end cap 369685</p>

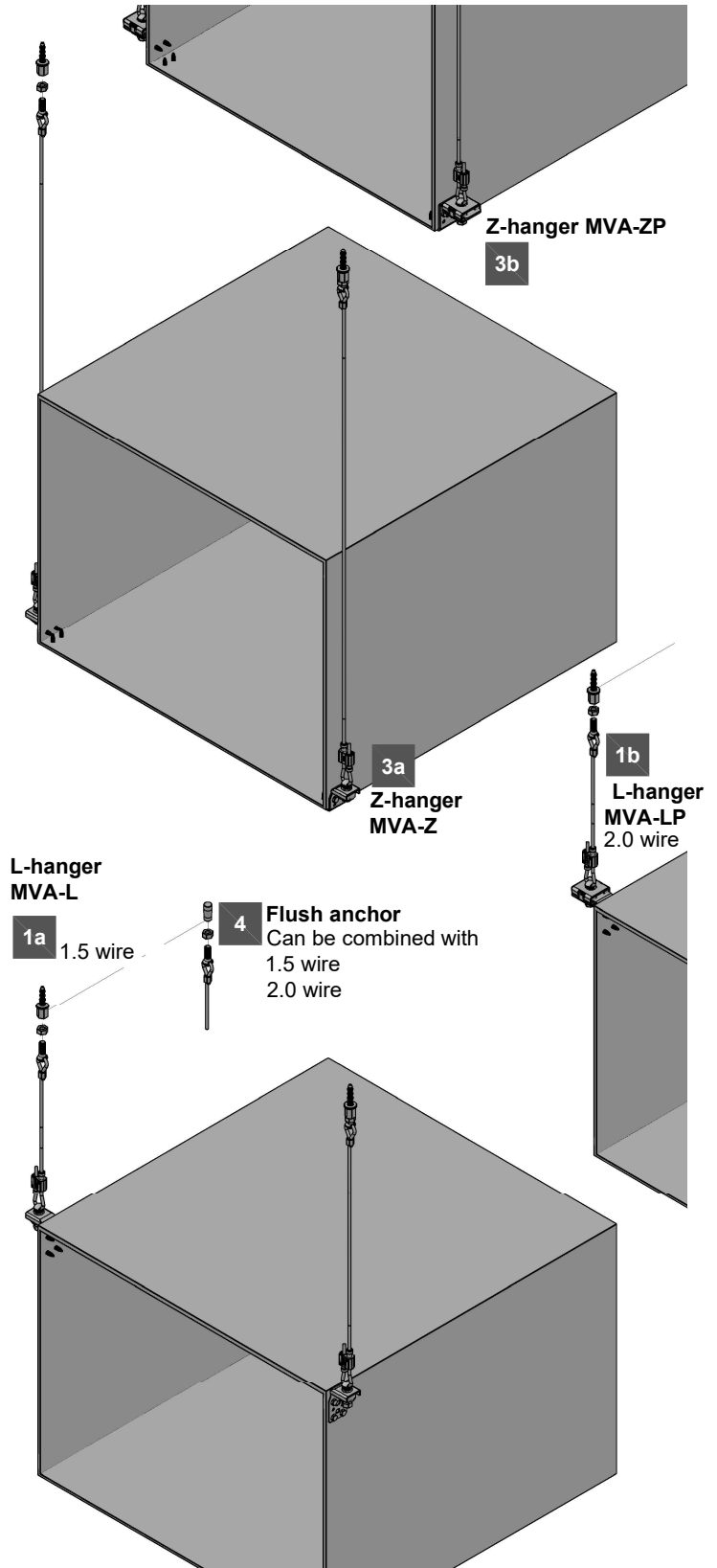


Application description	Application	Product lines	Base material
Wire system - Ventilation Trapeze Looped Around Structural Steel Profiles	 <b>2</b>	Wire system	Steel
<b>General comments</b>		MQ System	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the structural steel.</li> <li>Sharp edges must be avoided to prevent damage to the wire.</li> <li>Only for vertical suspended loads. Not suitable for bracing.</li> </ul>			

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# Ventilation - L, Z-hangers Fixed On Concrete Slab:

<p><b>1a</b></p>	<p><b>1a</b> Screw anchor, basic L-Hanger 1.5 wire</p> <p>1x screw anchor HUS-J 6x35 M8/M10 anchor 416740 HUS-J 6x55 M8/M10 anchor 423180 1x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p> <p>Connection to L-hanger 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184524</p> <p>L-hanger 1x MVA-L L-hanger 386535</p> <p>Self-tapping screws 4xS-MS 01Z 4.0x13 S-screw 406471</p>
<p><b>1b</b></p>	<p><b>1b</b> Screw anchor, premium L-Hanger 2.0 wire</p> <p>1x screw anchor HUS-J 6x35 M8/M10 anchor 416740 HUS-J 6x55 M8/M10 anchor 423180 1x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p> <p>Connection to L-hanger 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504 1x A 8,4x16 washer 2184556</p> <p>L-hanger 1x MVA-LP 60 L-hanger 411500</p> <p>Self-tapping screws 4xS-MS 01Z 4.0x13 S-screw 406471</p>
<p><b>2</b></p>	<p><b>2</b> Alternative L-hangers</p> <p>MVA-L L-hanger 386535 Suitable for wire 1.5</p> <p>MVA-LP 60 L-hanger 411500 Suitable for wire 1.5 and 2.0</p> <p>MVA-LP 100 L-hanger 411501 Suitable for wire 1.5 and 2.0</p>
<p><b>3a</b></p>	<p><b>3</b> Alternative Z-hangers</p> <p>MVA-Z Z-hanger 386532 Suitable for wire 1.5</p> <p>MVA-ZP Z-hanger 411499 Suitable for wire 1.5 and 2.0</p>
<p><b>4</b></p>	<p><b>4</b> Alternative HKD flush anchor</p> <p>Anchor 1x flush anchor HKD M8x25 anchor 376957 HKD M8x30 anchor 376959 HKD M8x40 anchor 376961</p>



Application description	Application	Product lines	Base material
Wire system - Ventilation L, Z-hangers On Concrete	<b>3</b>	Wire system	Concrete
<b>General comments</b>		L, Z angles	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the anchor within the chosen base material and L/Z-hanger.</li> <li>Only for vertically suspended loads. Eye-bolt not suitable for bracing.</li> </ul>			

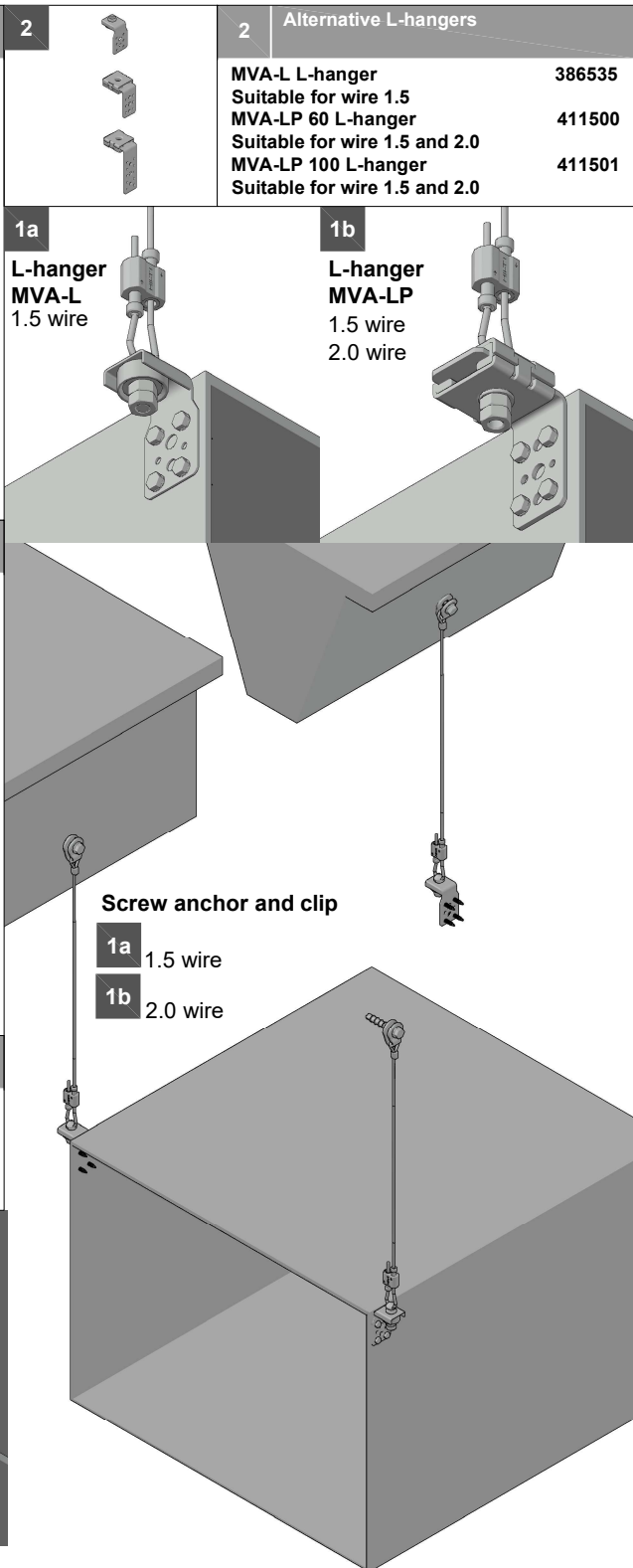
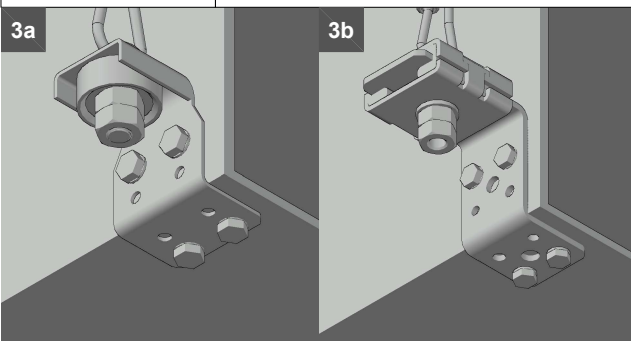


# Ventilation - L, Z-hangers Fixed On A Side Of A Concrete Girder:

	<b>1a</b> Clip Attachment 1.5 wire	<b>2</b>	<b>2</b> Alternative L-hangers
	<b>Clip clip</b> 1x MW-C 2287563 <b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712 <b>Loop combo</b> 1x loop and lock Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076 <b>Connection to L-hanger</b> 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504 <b>L-hanger</b> 1x MVA-L L-hanger 386535 Self-tapping screws 4x S-MS 01Z 4.0x13 S-screw 406471		MVA-L L-hanger 386535 Suitable for wire 1.5 MVA-LP 60 L-hanger 411500 Suitable for wire 1.5 and 2.0 MVA-LP 100 L-hanger 411501 Suitable for wire 1.5 and 2.0

	<b>1b</b> Clip Attachment 2.0 wire
	<b>Clip</b> 1x MW-C 2287563 <b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712 <b>Loop combo</b> 1x loop and lock Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081 <b>Connection to L-hanger</b> 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504 1x A 8,4x16 washer 2184556 <b>L-hanger</b> 1x MVA-LP 60 L-hanger 411500 Self-tapping screws 4x S-MS 01Z 4.0x13 S-screw 406471

<b>3a</b>	<b>3</b> Alternative Z-hanger
<b>3b</b>	MVA-Z Z-hanger 386532 Suitable for wire 1.5 MVA-ZP Z-hanger 411499 Suitable for wire 1.5 and 2.0



For all other alternative L,Z-hangers look previous pages or [www.hilti.com](http://www.hilti.com)

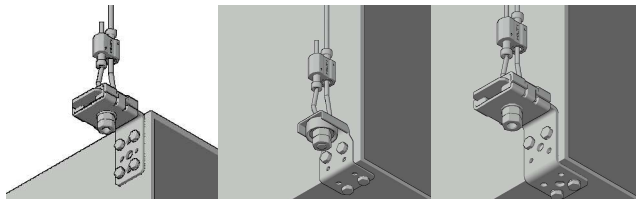
Application description	Application	Product lines	Base material
Wire system - Ventilation - L, Z-hangers On A Side Of A Concrete Girder		3	Wire system
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity with the capacity of the anchor within the chosen base material and L/Z-hangers. This capacity is affected by the angle of loading from the vertical and the prying factor</li> <li>Only one wire may be suspended on each clip</li> </ul>		L, Z-hangers	Concrete

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# Ventilation - L, Z-hangers Fixed On Metal Deck:

<p>1a</p>	<p><b>1a</b> Deck hook 1.5 wire</p> <p>Deck hook 1x MW-DH deck hook 2277567</p> <p>Loop combo 1x loop and lock Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076</p> <p>L-hanger and connection 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504 1x A 8,4x16 washer 2184556 1x MVA-L L-hanger 386535</p> <p>Self-tapping screws 4x S-MS 01Z 4.0x13 S-screw 406471</p>	<p>2c</p>	<p><b>2c</b> Through bolted V-hanger, premium L-hanger, 2.0 wire</p> <p>V-Hanger 1x MF-TSH M8 V-hanger 229006 1x M8 nut 2184504</p> <p>Through-bolt version 1-t-rod 1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p>Through-bolt ver. 2-long h-head screw 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p> <p>L-hanger and connection 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504 1x A 8,4x16 washer 2184556 1x MVA-LP 60 L-hanger 411500</p> <p>Self-tapping screws 4x S-MS 01Z 4.0x13 S-screw 406471</p>
<p>1b</p>	<p><b>1b</b> Deck hook, premium L-Hanger 2.0 wire</p> <p>Deck hook 1x MW-DH deck hook 2277567</p> <p>Loop combo 1x loop and lock Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081</p> <p>L-hanger and connection 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504 1x A 8,4x16 washer 2184556 1x MVA-LP 60 L-hanger 411500</p> <p>Self-tapping screws 4x S-MS 01Z 4.0x13 S-screw 406471</p>	<p>Deck Hook 1a 1.5 wire 1b 2.0 wire</p> <p>2 V-hanger 1.5 wire 2.0 wire</p> <p>3</p>	
<p>2a</p>	<p><b>2a</b> Through bolted V-hanger 1.5 wire</p> <p>V-Hanger 1x MF-TSH M8 V-hanger 229006 1x M8 nut 2184504</p> <p>Through-bolt version 1-t-rod 1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p>Through-bolt ver. 2-long h-head screw 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p> <p>Connection to L-hanger 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504</p> <p>L-hanger 1x MVA-L L-hanger 386535</p> <p>Self-tapping screws 4x S-MS 01Z 4.0x13 S-screw 406471</p>		

For all other alternative L,Z-hangers look previous pages or [www.hilti.com](http://www.hilti.com)



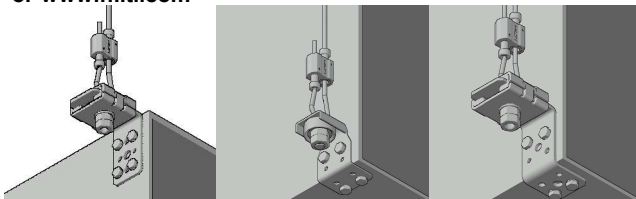
Application description	Application	Product lines	Base material
Wire system - Ventilation - L, Z-hangers On Metal Deck	<p>3</p>	Wire system	Metal Deck
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and where relevant the V-hanger</li> <li>The deck hook must hang vertically from the deck.</li> <li>Only one wire may be suspended on each deck hook.</li> </ul>		L, Z-hangers	

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# Ventilation - L, Z-hangers Fixed On Metal Deck:

	<p><b>1a</b> V-hanger With Self-tapping screws 1.5 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558          1x M8 nut 2184504          6x S-MS 01Z 4.0x13 S-screw 406471</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock          Kit MW-EB M8 L 1.5/1m 2280019          Kit MW-EB M8 L 1.5/2m 2280040          Kit MW-EB M8 L 1.5/3m 2280041          Kit MW-EB M8 L 1.5/5m 2280042          Kit MW-EB M8 L 1.5/10m 2280043</p> <p><b>Connection to L-hanger</b></p> <p>1x MW-EB M8x26 eye bolt 2277563          2x M8 nut 2184504          1x MVA-L L-hanger 386535          4x S-MS 01Z 4.0x13 S-screw 406471</p>		<p><b>2b</b> Through bolted V-hanger 2.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558          1x M8 nut 2184504</p> <p><b>Through-bolt version 1 t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793          4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2 long h-head screw</b></p> <p>1x M8x120 4.8 h-head screw 2063165          2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock          Kit MW-EB M8 L 2.0/1m 2280044          Kit MW-EB M8 L 2.0/2m 2280045          Kit MW-EB M8 L 2.0/3m 2280046          Kit MW-EB M8 L 2.0/5m 2280047          Kit MW-EB M8 L 2.0/10m 2280048</p> <p><b>L-hanger and connection</b></p> <p>1x MW-EB M8x26 eye bolt 2277563          2x M8 nut 2184504          1x A 8,4x16 washer 2184556          1x MVA-LP 60 L-hanger 411500</p> <p><b>Self-tapping screws</b></p> <p>4x S-MS 01Z 4.0x13 S-screw 406471</p>
	<p><b>1b</b> V-hanger with self-tapping screws 2.0 wire</p> <p><b>V-hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558          1x M8 nut 2184504          6x S-MS 01Z 4.0x13 S-screw 406471</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock          Kit MW-EB M8 L 2.0/1m 2280044          Kit MW-EB M8 L 2.0/2m 2280045          Kit MW-EB M8 L 2.0/3m 2280046          Kit MW-EB M8 L 2.0/5m 2280047          Kit MW-EB M8 L 2.0/10m 2280048</p> <p><b>Connection to L-hanger</b></p> <p>1x MW-EB M8x26 eye bolt 2277563          2x M8 nut 2184504          1x A 8,4x16 washer 2184556          1x MVA-LP 60 L-hanger 411500          4x S-MS 01Z 4.0x13 S-screw 406471</p>		<p><b>2a</b> Through bolted V-hanger 1.5 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558          1x M8 nut 2184504</p> <p><b>Through-bolt version 1 t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793          4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2 long h-head screw</b></p> <p>1x M8x120 4.8 hex. head screw 2063165          2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock          Kit MW-EB M8 L 1.5/1m 2280019          Kit MW-EB M8 L 1.5/2m 2280040          Kit MW-EB M8 L 1.5/3m 2280041          Kit MW-EB M8 L 1.5/5m 2280042          Kit MW-EB M8 L 1.5/10m 2280043</p> <p><b>Connection to L-hanger</b></p> <p>1x MW-EB M8x26 eye bolt 2277563          2x M8 nut 2184504          1x MVA-L L-hanger 386535</p> <p><b>Self-tapping screws</b></p> <p>4x S-MS 01Z 4.0x13 S-screw 406471</p>

For all other alternative L,Z-hangers look previous pages or [www.hilti.com](http://www.hilti.com)



**V-hanger with self-tapping screws**

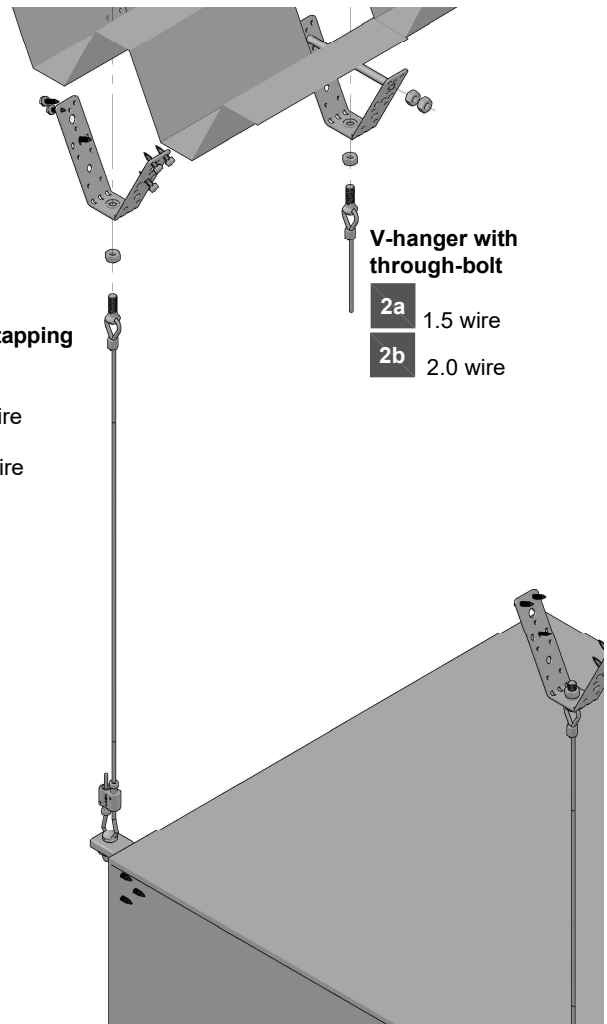
**1a** 1.5 wire

**1b** 2.0 wire

**V-hanger with through-bolt**

**2a** 1.5 wire

**2b** 2.0 wire

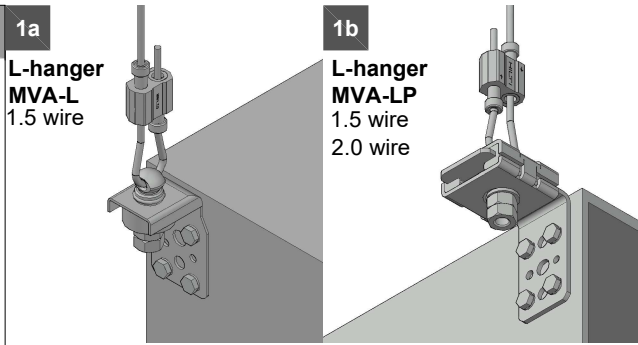


Application description	Application	Product lines	Base material
Wire system - Ventilation - L, Z-hangers On Metal Deck		Wire system	Metal deck
<b>General comments</b>		L, Z-hangers	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and all connecting components</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>			

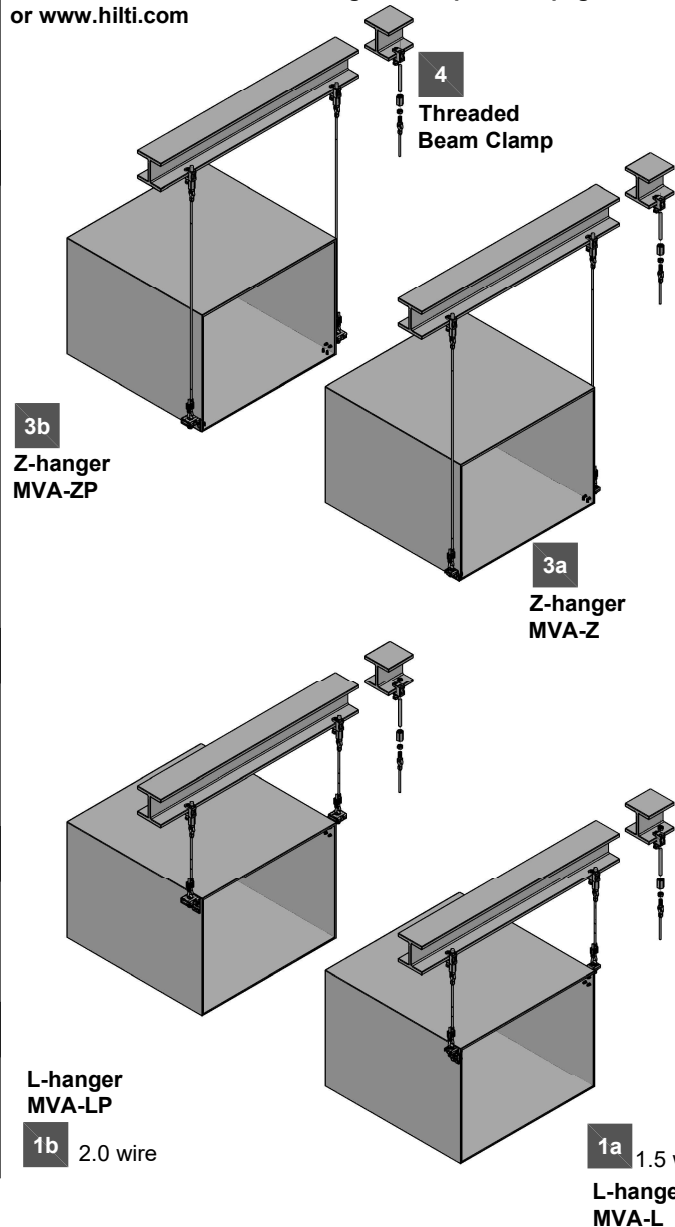
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# Ventilation - L, Z-hangers Fixed On Structural Steel Using Beam Clamps:

	<p><b>1a</b> Unthreaded Beam Clamp 1.5 wire</p> <p><b>Beam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 1.5/1m 2280019</p> <p>Kit MW-EB M8 L 1.5/2m 2280040</p> <p>Kit MW-EB M8 L 1.5/3m 2280041</p> <p>Kit MW-EB M8 L 1.5/5m 2280042</p> <p>Kit MW-EB M8 L 1.5/10m 2280043</p> <p><b>Connection to L-hanger</b></p> <p>1x MW-EB M8x26 eye bolt 2277563</p> <p>2x M8 nut 2184504</p> <p><b>L-hanger</b></p> <p>1x MVA-L L-hanger 386535</p> <p><b>Self-tapping screws</b></p> <p>4x S-MS 01Z 4.0x13 S-screw 406471</p>
	<p><b>1b</b> Unthreaded Beam Clamp 2.0 wire</p> <p><b>Beam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>1x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 2.0/1m 2280044</p> <p>Kit MW-EB M8 L 2.0/2m 2280045</p> <p>Kit MW-EB M8 L 2.0/3m 2280046</p> <p>Kit MW-EB M8 L 2.0/5m 2280047</p> <p>Kit MW-EB M8 L 2.0/10m 2280048</p> <p><b>L-hanger and connection</b></p> <p>1x MW-EB M8x26 eye bolt 2277563</p> <p>2x M8 nut 2184504</p> <p>1x A 8,4x16 washer 2184556</p> <p>1x MVA-LP 60 L-hanger 411500</p> <p><b>Self-tapping screws</b></p> <p>4x S-MS 01Z 4.0x13 S-screw 406471</p>
	<p><b>2</b> Alternative L-hangers</p> <p>MVA-L L-hanger 386535</p> <p>Suitable for wire 1.5</p> <p>MVA-LP 60 L-hanger 411500</p> <p>Suitable for wire 1.5 and 2.0</p> <p>MVA-LP 100 L-hanger 411501</p> <p>Suitable for wire 1.5 and 2.0</p>
	<p><b>3</b> Alternative Z-hangers</p> <p>MVA-Z Z-hanger 386532</p> <p>Suitable for wire 1.5</p> <p>MVA-ZP Z-hanger 411499</p> <p>Suitable for wire 1.5 and 2.0</p>
	<p><b>4</b> Alternative Threaded Beam Clamp</p> <p><b>Beam clamp</b></p> <p>1x MAB-M8 beam clamp 2006878</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p>1x M8 nut 2184504</p>



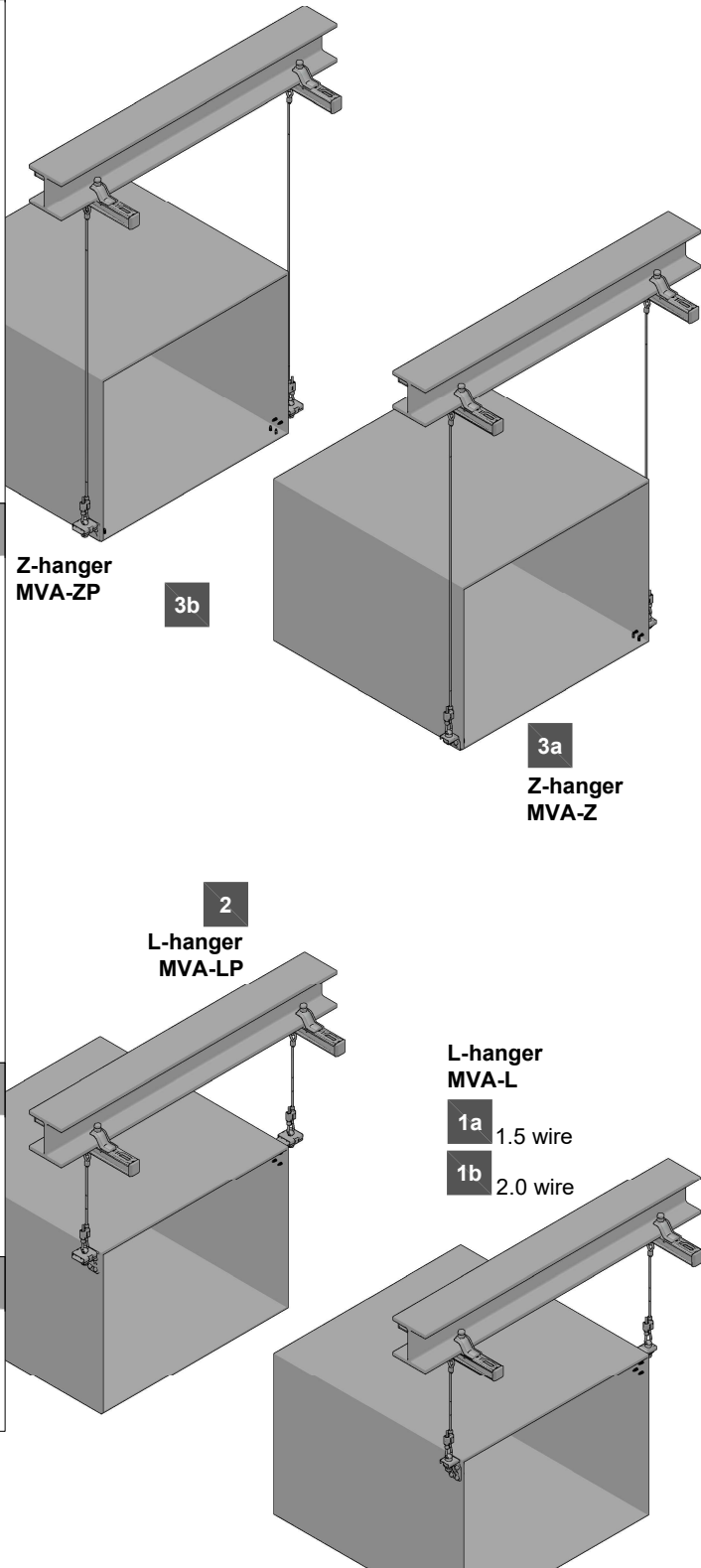
For all other alternative L,Z-hangers look previous pages or [www.hilti.com](http://www.hilti.com)



Application description	Application	Product lines	Base material
Wire system - Ventilation L, Z-hangers On Structural Steel	<p><b>3</b></p>	Wire system	Structural Steel
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the beam clamp and structural steel and all connecting parts.</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		Beam Clamps	

# Ventilation - L, Z-hangers Fixed On Structural Steel - Centric solution using MM Channel System:

<p>1a</p>	<p><b>1a</b> Centric fixation of MM System channel, 1.5 wire</p> <p><b>Clamps</b> 2x MM-T-16-36 418763</p> <p><b>Channel e.g.</b> 1x MM-C-30 2m .....m 418749</p> <p><b>Saddle nut</b> 1x MM-S M8 418760</p> <p><b>Nut</b> 1x M8 nut 2184504</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p> <p><b>Connection to L-hanger</b> 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184504</p> <p><b>L-hanger</b> 1x MVA-L L-hanger 386535</p> <p><b>Self-tapping screws</b> 4x S-MS 01Z 4.0x13 S-screw 406471</p>
<p>1b</p>	<p><b>1b</b> Centric fixation of MM System channel, 2.0 wire</p> <p><b>Clamps</b> 2x MM-T-16-36 418763</p> <p><b>Channel e.g.</b> 1x MM-C-30 2m .....m 418749</p> <p><b>Saddle nut</b> 1x MM-S M8 418760</p> <p><b>Nut</b> 1x M8 nut 2184504</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p> <p><b>L-hanger and connection to L-hanger</b> 1x MW-EB M8x26 eye bolt 2277563 2x M8 nut 2184524 1x A 8,4x16 washer 2184556 1x MVA-LP 60 L-hanger 411500</p> <p><b>Self-tapping screws</b> 4x S-MS 01Z 4.0x13 S-screw 406471</p>
<p>2</p>	<p><b>2</b> Alternative L-hangers</p> <p>MVA-L L-hanger 386535 Suitable for wire 1.5</p> <p>MVA-LP 60 L-hanger 411500 Suitable for wire 1.5 and 2.0</p> <p>MVA-LP 100 L-hanger 411501 Suitable for wire 1.5 and 2.0</p>
<p>3a</p>	<p><b>3</b> Alternative Z-hangers</p> <p>MVA-Z Z-hanger 386532 Suitable for wire 1.5</p> <p>MVA-ZP Z-hanger 411499 Suitable for wire 1.5 and 2.0</p>
<p>3b</p>	

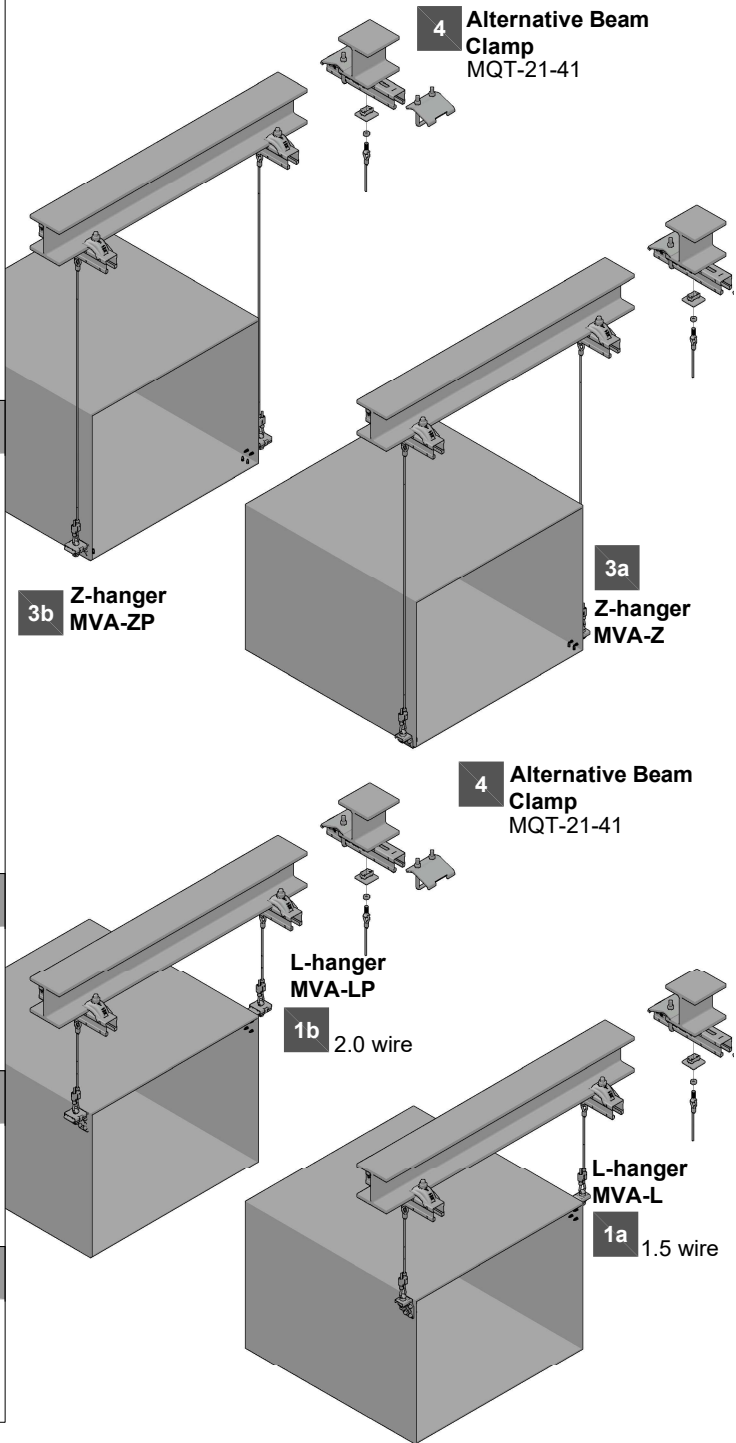


Application description	Application	Product lines	Base material
Wire system - Ventilation L, Z-hangers On Structural Steel Using MM Channels	3	Wire system	Structural Steel
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MM System	



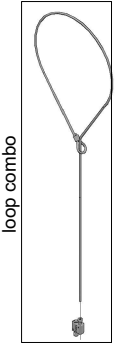
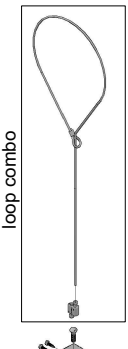
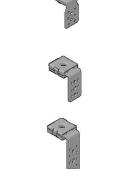


# Ventilation - L, Z-hangers Fixed On Structural Steel - Centric solution using MQ Channel System:

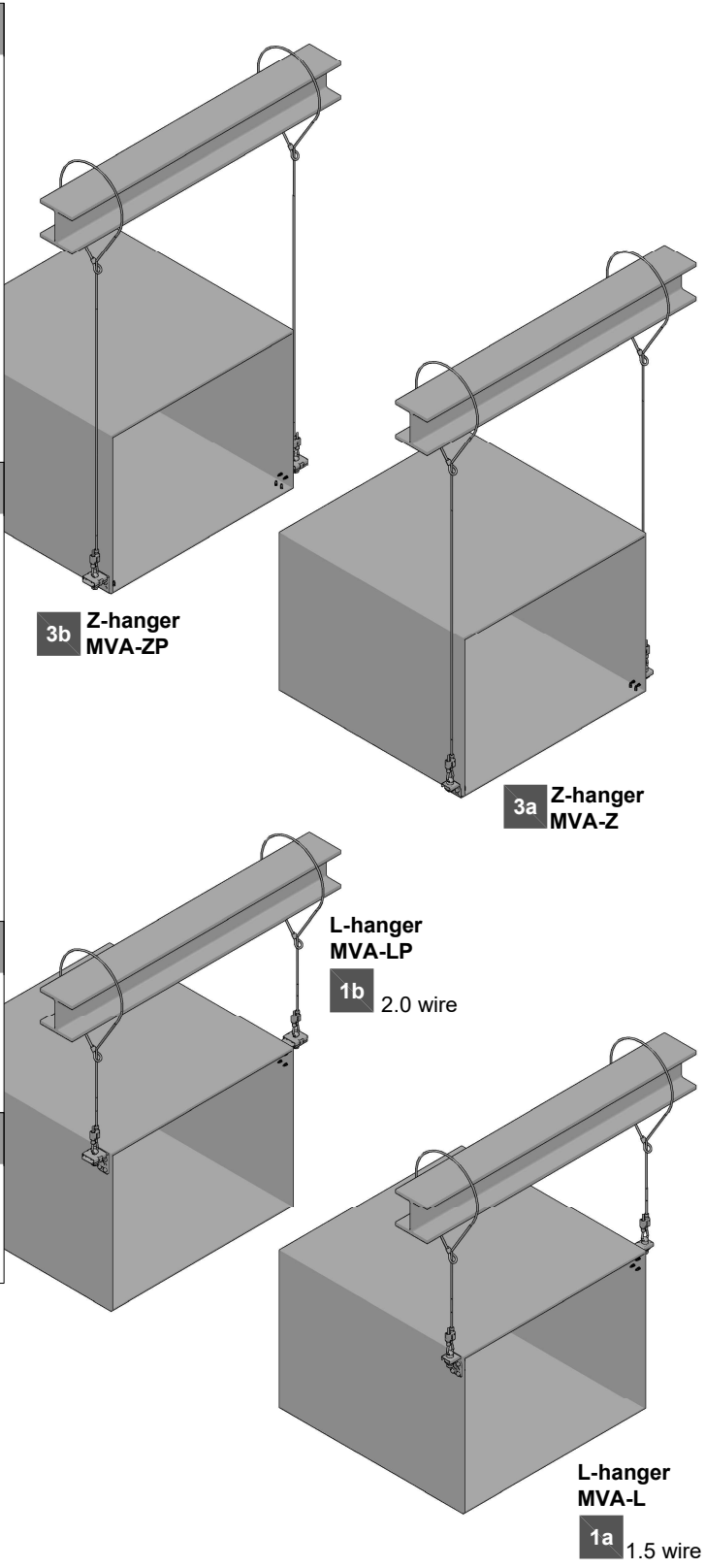
<p>1a</p>	<p><b>1a</b> Centric fixation of MQ System channel, 1.5 wire</p> <p>2x MQT-U beam clamp 2115454            1x MQ-41 3m channel 369591            1x MQA-S-M8 saddle nut 2141906            1x M8 nut 2184504            Eyebolt combo            1x eyebolt and lock            Kit MW-EB M8 L 1.5/1m 2280019            Kit MW-EB M8 L 1.5/2m 2280040            Kit MW-EB M8 L 1.5/3m 2280041            Kit MW-EB M8 L 1.5/5m 2280042            Kit MW-EB M8 L 1.5/10m 2280043</p> <p>Connection to L-hanger            1x MW-EB M8x28 eye bolt 2277563            2x M8 nut 2184524            L-hanger            1x MVA-L L-hanger 386535            Self-tapping screws            4x S-MS 01Z 4.0x13 S-screw 406471</p>
<p>1b</p>	<p><b>1b</b> Centric fixation of MQ System channel, 2.0 wire</p> <p>2x MQT-U beam clamp 2115454            1x MQ-41 3m channel 369591            1x MQA-S-M8 saddle nut 2141906            1x M8 nut 2184504            Eyebolt combo            1x eyebolt and lock            Kit MW-EB M8 L 2.0/1m 2280044            Kit MW-EB M8 L 2.0/2m 2280045            Kit MW-EB M8 L 2.0/3m 2280046            Kit MW-EB M8 L 2.0/5m 2280047            Kit MW-EB M8 L 2.0/10m 2280048</p> <p>L-hanger and connection            1x MW-EB M8x28 eye bolt 2277563            2x M8 nut 2184504            1x A 8,4x16 washer 2184556            1x MVA-LP 60 L-hanger 411500            Self-tapping screws            4x S-MS 01Z 4.0x13 S-screw 406471</p>
<p>2</p>	<p><b>2</b> Alternative L-hangers</p> <p>MVA-L L-hanger 386535            Suitable for wire 1.5            MVA-LP 60 L-hanger 411500            Suitable for wire 1.5 and 2.0            MVA-LP 100 L-hanger 411501            Suitable for wire 1.5 and 2.0</p>
<p>3a</p>	<p><b>3</b> Alternative Z-hangers</p> <p>MVA-Z Z-hanger 386532            Suitable for wire 1.5            MVA-ZP Z-hanger 411499            Suitable for wire 1.5 and 2.0</p>
<p>4</p>	<p><b>4</b> Alternative Beam Clamp MQT</p> <p>2x MQT-21-41 beam clamp 369675            1x MQ-41 3m ...m channel 369591            1x MQA-S-M8 saddle nut 2141906            1x M8 nut 2184504</p>

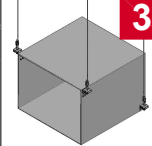


Application description	Application	Product lines	Base material
Wire system - Ventilation - L, Z-hangers On Structural Steel - MQ System	<p>3</p>	Wire system	Structural Steel
General comments		MQ System	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		L,Z Hangers	

# Ventilation - L, Z-hangers Fixed On Structural Steel - Looping The Profile:

<p><b>1a</b></p>  <p>loop combo</p>	<p><b>1a</b> Looping the profile with 1.5 wire</p> <p><b>Loop combo</b>  <b>1x loop and lock</b>            Kit MW-LP L 1.5/1m 2280072            Kit MW-LP L 1.5/2m 2280073            Kit MW-LP L 1.5/3m 2280074            Kit MW-LP L 1.5/5m 2280075            Kit MW-LP L 1.5/10m 2280076</p> <p><b>Connection to L-hanger</b>            1x MW-EB M8x26 eye bolt 2277563            2x M8 nut 2184504            L-hanger            1x MVA-L L-hanger 386535            Self-tapping screws            4x S-MS 01Z 4.0x13 S-screw 406471</p>
<p><b>1b</b></p>  <p>loop combo</p>	<p><b>1b</b> Looping the profile with 2.0 wire</p> <p><b>Loop combo</b>  <b>1x loop and lock</b>            Kit MW-LP L 2.0/1m 2280077            Kit MW-LP L 2.0/2m 2280078            Kit MW-LP L 2.0/3m 2280079            Kit MW-LP L 2.0/5m 2280080            Kit MW-LP L 2.0/10m 2280081</p> <p><b>Connection to L-hanger</b>            1x MW-EB M8x26 eye bolt 2277563            2x M8 nut 2184504            1x A 8,4x16 washer 2184556            L-hanger            1x MVA-LP 60 L-hanger 411500            Self-tapping screws            4x S-MS 01Z 4.0x13 S-screw 406471</p>
<p><b>2</b></p> 	<p><b>2</b> Alternative L-hangers</p> <p>MVA-L L-hanger 386535            Suitable for wire 1.5            MVA-LP 60 L-hanger 411500            Suitable for wire 1.5 and 2.0            MVA-LP 100 L-hanger 411501            Suitable for wire 1.5 and 2.0</p>
<p><b>3a</b></p>  <p><b>3b</b></p> 	<p><b>3</b> Alternative Z-hangers</p> <p>MVA-Z Z-hanger 386532            Suitable for wire 1.5            MVA-ZP Z-hanger 411499            Suitable for wire 1.5 and 2.0</p>

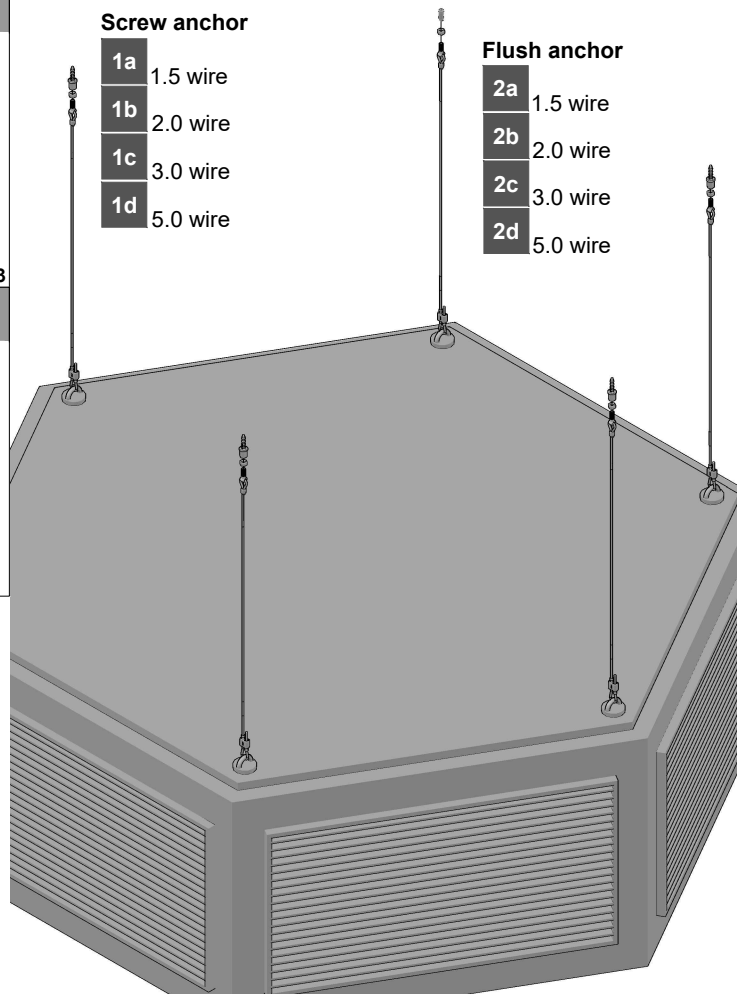


Application description	Application	Product lines	Base material
Wire system - Ventilation - L, Z-hangers On Structural Steel - Looped	 <p><b>3</b></p>	Wire system	Structural Steel
<b>General comments</b>		MQ System	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the structural steel and all connected parts.</li> <li>Sharp edges must be avoided to prevent damage to the wire.</li> </ul>		L,Z Hangers	

Hilti strongly advises customers to verify the respective product application for the intended use by consulting a structural engineer and making the necessary calculations to ensure compliance with the applicable norms and standards. Failure to consult and heed the advice of a structural engineer will free Hilti from any liability. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use, within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature, and that the relevant application limits are not exceeded at any time. All rights reserved by Hilti Corporation. Duplication, utilization and/or publication of drawings contained in this manual are not permitted unless expressly agreed by Hilti Corporation.

# Ventilation Unit On a Concrete Slab:

1a		1a	Screw anchor, M8 support 1.5 wire		2a	Flush anchor, M8 support 1.5, 2.0, 3.0 wire
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504		1x	flush anchor HKD M8x25 anchor 376957 HKD M8x30 anchor 376959 HKD M8x40 anchor 376961 M8 nut 2184504
1b		1b	Screw anchor, M8 support 2.0 wire		2b	Anchor
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504		1x	
1c		1c	Screw anchor, M8 support 3.0 wire		2c	Anchor
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504		1x	
1d		1d	Screw anchor, M10 support 5.0 wire		2d	Flush anchor, M10 support 5.0 wire
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 416740 HUS-I 6x55 M8/M10 anchor 423180 M10 nut 2184505		1x	flush anchor HKD M10x25 anchor 2037453 HKD M10x30 anchor 376965 HKD M10x40 anchor 376967 M10 nut 2184505



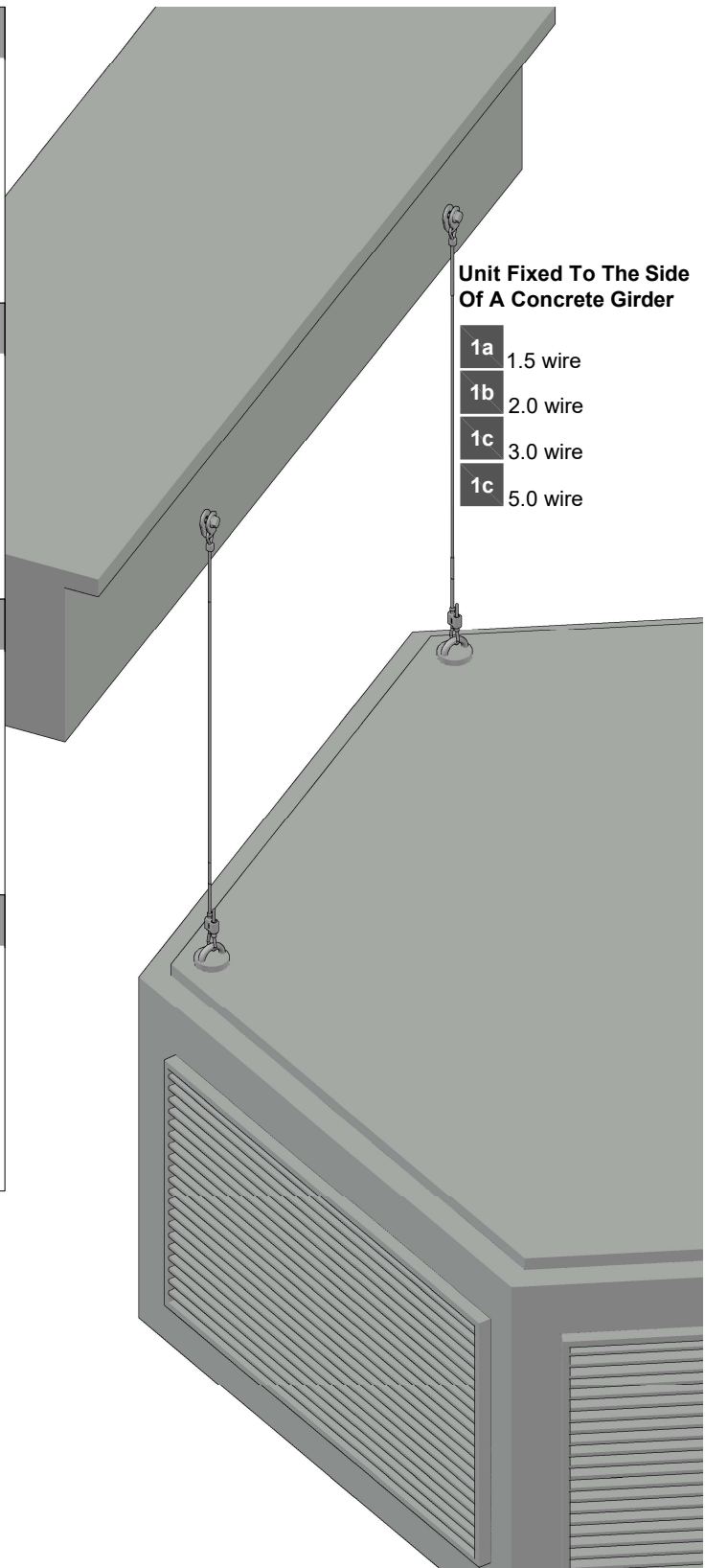
Application description	Application	Product lines	Base material
Wire system - Ventilation Unit On Concrete Slab	 <b>4</b>	Wire system	Concrete
General comments		Anchors	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the anchor within the chosen base material and all connected parts.</li> <li>Only for vertically suspended loads. Eye-bolt not suitable for bracing.</li> </ul>			

Hilti strongly advises customers to verify the respective product application for the intended use by consulting a structural engineer and making the necessary calculations to ensure compliance with the applicable norms and standards. Failure to consult and heed the advice of a structural engineer will free Hilti from any liability. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use, within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature, and that the relevant application limits are not exceeded at any time. All rights reserved by Hilti Corporation. Duplication, utilization and/or publication of drawings contained in this manual are not permitted unless expressly agreed by Hilti Corporation.



# Ventilation Unit, On Concrete Girder:

<p><b>1a</b></p> <p>loop combo</p>	<p><b>1a</b> Clip attachement 1.5 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076</p>
<p><b>1b</b></p> <p>loop combo</p>	<p><b>1b</b> Clip attachement 2.0 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081</p>
<p><b>1c</b></p> <p>loop combo</p>	<p><b>1c</b> Clip attachement 3.0 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 3.0/1m 2280082 Kit MW-LP L 3.0/2m 2280083 Kit MW-LP L 3.0/3m 2280084 Kit MW-LP L 3.0/5m 2280085 Kit MW-LP L 3.0/10m 2280086</p>
<p><b>1d</b></p> <p>loop combo</p>	<p><b>1d</b> Clip attachement 5.0 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 5.0/1m 2287096 Kit MW-LP L 5.0/2m 2287097 Kit MW-LP L 5.0/3m 2287098 Kit MW-LP L 5.0/5m 2287099 Kit MW-LP L 5.0/10m 2287580</p>



Application description	Application	Product lines	Base material
Wire system - Ventilation Unit On Concrete Girder	<p><b>4</b></p>	Wire system	Concrete
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity with the capacity of all connected parts and the anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor</li> <li>Only one wire may be suspended on each clip</li> </ul>		Anchors	

# Ventilation Unit Fixed On Metal Deck - Hook and V-hanger:

	<p><b>1a</b> Deck hook 1.5 wire</p> <p><b>Deck hook</b> 1x MW-DH deck hook 2277567</p> <p><b>Loop combo</b> 1x loop and lock Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076</p>		<p><b>2c</b> Through bolted V-hanger 3.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 216465</p> <p><b>Through-bolt version 1-t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053</p>
	<p><b>1b</b> Deck hook 2.0 wire</p> <p><b>Deck hook</b> 1x MW-DH deck hook 2277567</p> <p><b>Loop combo</b> 1x loop and lock Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081</p>		<p><b>2d</b> Through bolted V-hanger 5.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M10 V-hanger 229007 1x M10 nut 2184505</p> <p><b>Through-bolt version 1-t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058</p>
	<p><b>2a</b> Through bolted V-hanger 1.5 wire</p> <p><b>AV-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 216465</p> <p><b>Through-bolt version 1 t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2 ong h-head screw</b> 1x M8x120 4.8 h-head screw 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p>		
	<p><b>2b</b> Through bolted V-hanger 2.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 216465</p> <p><b>Through-bolt version 1-t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p>		

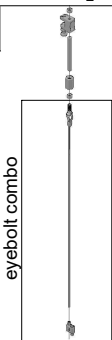
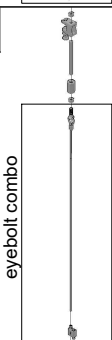
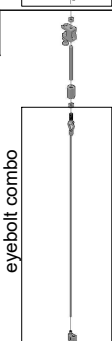
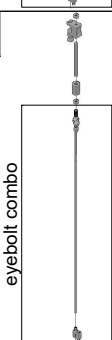
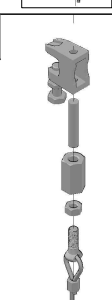
Application description	Application	Product lines	Base material
Wire system - Ventilation Unit Fixed On Metal Deck		4 Wire system	Metal Deck
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and all connected parts.</li> <li>The deck hook must hang vertically from the deck.</li> <li>Only one wire may be suspended on each deck hook.</li> </ul>		V-Hangers	

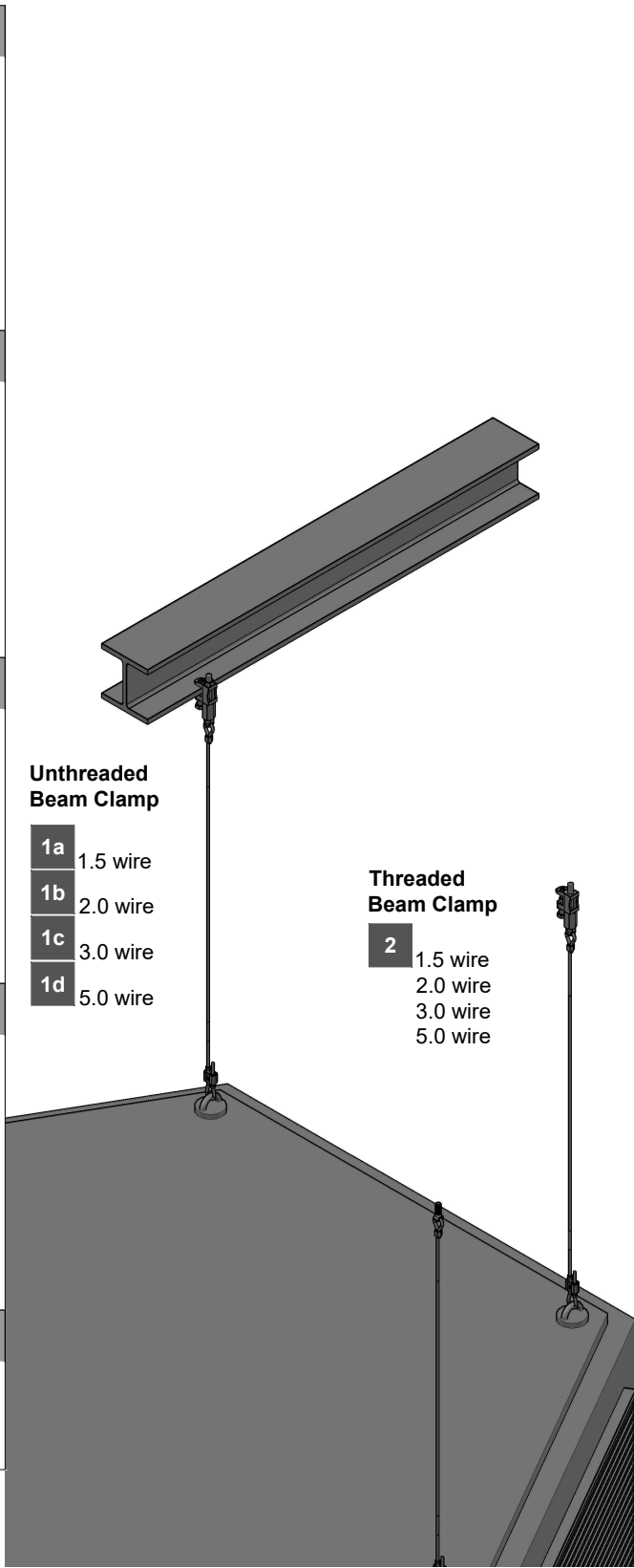
# Ventilation Unit Fixed On Metal Deck - V-hanger with Integrated Nut:

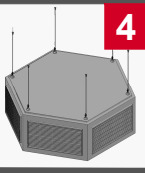
<p>1a</p>	<p><b>1a</b> Through bolted V-Hanger 1.5 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2 long h-head screw</b></p> <p>1x M8x120 4.8 h-head screw 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p>	<p>1d</p>	<p><b>1d</b> Through bolted V-Hanger 5.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M10 V-hanger 386559 1x M10 nut 2184505</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b></p> <p>1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058</p>
<p>1b</p>	<p><b>1b</b> Through bolted V-Hanger 2.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b></p> <p>1x M8x120 4.8 h-head screw 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p>	<p><b>Through bolted V-Hanger</b></p> <p>1a 1.5 wire 1b 2.0 wire 1c 3.0 wire 1d 5.0 wire</p> <p><b>V-Hanger with self-tapping screws</b></p> <p>2 1.5 wire 2 2.0 wire 2 3.0 wire 2 5.0 wire</p>	
<p>1c</p>	<p><b>1c</b> Through bolted V-Hanger 3.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b></p> <p>1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053</p>		
<p>2</p>	<p><b>2</b> V-Hanger With Self-Tapping Screws 1.5, 2.0, 3.0 and 5.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 MVA-MS M10 V-hanger 386559</p> <p><b>Self-tapping screws</b></p> <p>6x S-MS 01Z 4.0x13 S-screw 406471</p> <p><b>Securing nut</b></p> <p>1x M8 nut 2184504 M10 nut 2184505</p>		

Application description	Application	Product lines	Base material
Wire system - Ventilation Unit On Metal Deck	<p>4</p>	Wire system	Metal Deck
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and all connected parts.</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		V-Hangers	

# Ventilation Unit Fixed On Structural Steel Profiles - Beam Clamps:

<p><b>1a</b></p>  <p>eyebolt combo</p>	<p><b>1a</b> Unthreaded Beam Clamp 1.5 wire</p> <p><b>Beam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 1.5/1m 2280019</p> <p>Kit MW-EB M8 L 1.5/2m 2280040</p> <p>Kit MW-EB M8 L 1.5/3m 2280041</p> <p>Kit MW-EB M8 L 1.5/5m 2280042</p> <p>Kit MW-EB M8 L 1.5/10m 2280043</p>
<p><b>1b</b></p>  <p>eyebolt combo</p>	<p><b>1b</b> Unthreaded Beam Clamp 2.0 wire</p> <p><b>Beam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 2.0/1m 2280044</p> <p>Kit MW-EB M8 L 2.0/2m 2280045</p> <p>Kit MW-EB M8 L 2.0/3m 2280046</p> <p>Kit MW-EB M8 L 2.0/5m 2280047</p> <p>Kit MW-EB M8 L 2.0/10m 2280048</p>
<p><b>1c</b></p>  <p>eyebolt combo</p>	<p><b>1c</b> Unthreaded Beam Clamp 3.0 wire</p> <p><b>Beam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 3.0/1m 2280049</p> <p>Kit MW-EB M8 L 3.0/2m 2280050</p> <p>Kit MW-EB M8 L 3.0/3m 2280051</p> <p>Kit MW-EB M8 L 3.0/5m 2280052</p> <p>Kit MW-EB M8 L 3.0/10m 2280053</p>
<p><b>1d</b></p>  <p>eyebolt combo</p>	<p><b>1d</b> Unthreaded Beam Clamp 5.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MAB-11 375957</p> <p>2x M10 nut 2184505</p> <p>1x M10x1000 4.8 threaded rod 339795</p> <p>1x M10x30 coupler 216704</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M10 L 5.0/1m 2280054</p> <p>Kit MW-EB M10 L 5.0/2m 2280055</p> <p>Kit MW-EB M10 L 5.0/3m 2280056</p> <p>Kit MW-EB M10 L 5.0/5m 2280057</p> <p>Kit MW-EB M10 L 5.0/10m 2280058</p>
<p><b>2</b></p> 	<p><b>2</b> Threaded Beam Clamp</p> <p><b>Threaded Beam Clamp</b></p> <p>1x MAB-M8 2006878</p> <p>MAB-M10 2006879</p> <p>MAB-M12 2007210</p>

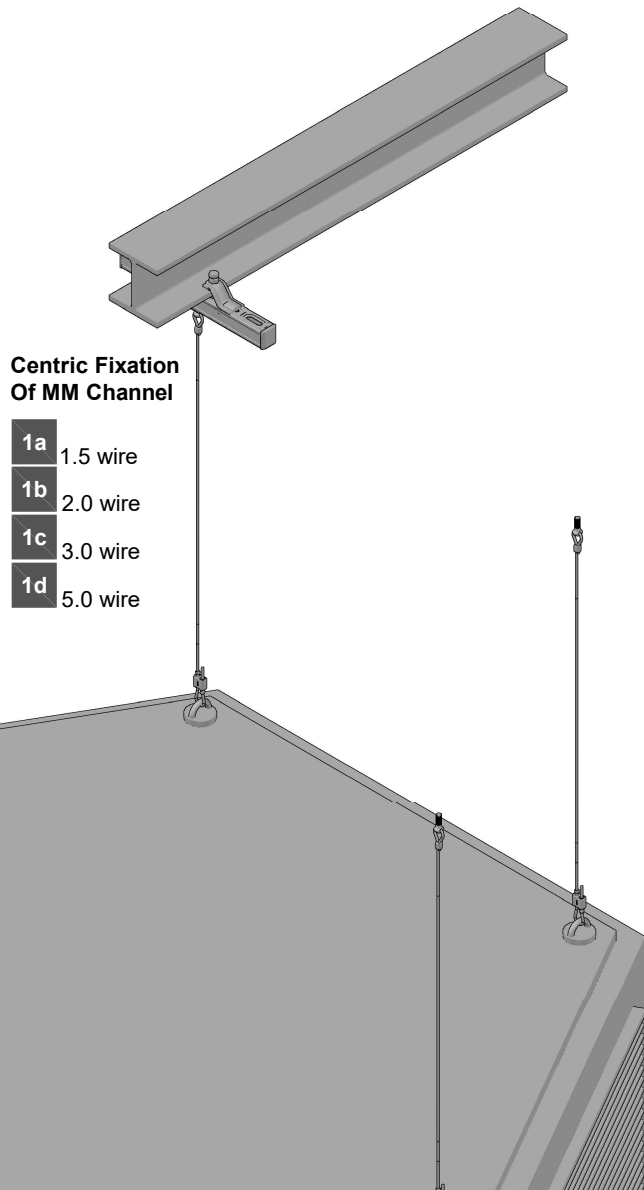


Application description	Application	Product lines	Base material
Wire system - Ventilation Unit Fixed On Structural Steel-Beam Clamps	 <p><b>4</b></p>	Wire system	Structural steel
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the structural steel and all connected parts.</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		Beam Clamps	

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# Ventilation Unit Fixed On Structural Steel Profiles - MM Channel:

<p><b>1a</b></p> <p>eyebolt combo</p>	<p><b>1a</b> Centric Fixation Of MM Channel 1.5 wire</p> <p>2x MM-T-16-36 beam clamps 418763            1x MM-C-30 2m .....m channel 418749            1x MM-S M8 saddle nut 418760            1x M8 nut 2184504</p> <p>Eyebolt combo            1x eyebolt and lock            Kit MW-EB M8 L 1.5/1m 2280019            Kit MW-EB M8 L 1.5/2m 2280040            Kit MW-EB M8 L 1.5/3m 2280041            Kit MW-EB M8 L 1.5/5m 2280042            Kit MW-EB M8 L 1.5/10m 2280043</p>
<p><b>1b</b></p> <p>eyebolt combo</p>	<p><b>1b</b> Centric Fixation Of MM Channel 2.0 wire</p> <p>2x MM-T-16-36 beam clamps 418763            1x MM-C-30 2m .....m channel 418749            1x MM-S M8 saddle nut 418760            1x M8 nut 2184504</p> <p>Eyebolt combo            1x eyebolt and lock            Kit MW-EB M8 L 2.0/1m 2280044            Kit MW-EB M8 L 2.0/2m 2280045            Kit MW-EB M8 L 2.0/3m 2280046            Kit MW-EB M8 L 2.0/5m 2280047            Kit MW-EB M8 L 2.0/10m 2280048</p>
<p><b>1c</b></p> <p>eyebolt combo</p>	<p><b>1c</b> Centric Fixation Of MM Channel 3.0 wire</p> <p>2x MM-T-16-36 beam clamps 418763            1x MM-C-30 2m .....m channel 418749            1x MM-S M8 saddle nut 418760            1x M8 nut 216465</p> <p>Eyebolt combo            1x eyebolt and lock            Kit MW-EB M8 L 3.0/1m 2280049            Kit MW-EB M8 L 3.0/2m 2280050            Kit MW-EB M8 L 3.0/3m 2280051            Kit MW-EB M8 L 3.0/5m 2280052            Kit MW-EB M8 L 3.0/10m 2280053</p>
<p><b>1d</b></p> <p>eyebolt combo</p>	<p><b>1d</b> Centric Fixation Of MM Channel 5.0 wire</p> <p>2x MM-T-16-36 beam clamps 418763            1x MM-C-30 2m .....m channel 418749            1x MM-S M10 saddle nut 418761            1x M10 nut 2184505</p> <p>Eyebolt combo            1x eyebolt and lock            Kit MW-EB M10 L 5.0/1m 2280054            Kit MW-EB M10 L 5.0/2m 2280055            Kit MW-EB M10 L 5.0/3m 2280056            Kit MW-EB M10 L 5.0/5m 2280057            Kit MW-EB M10 L 5.0/10m 2280058</p>

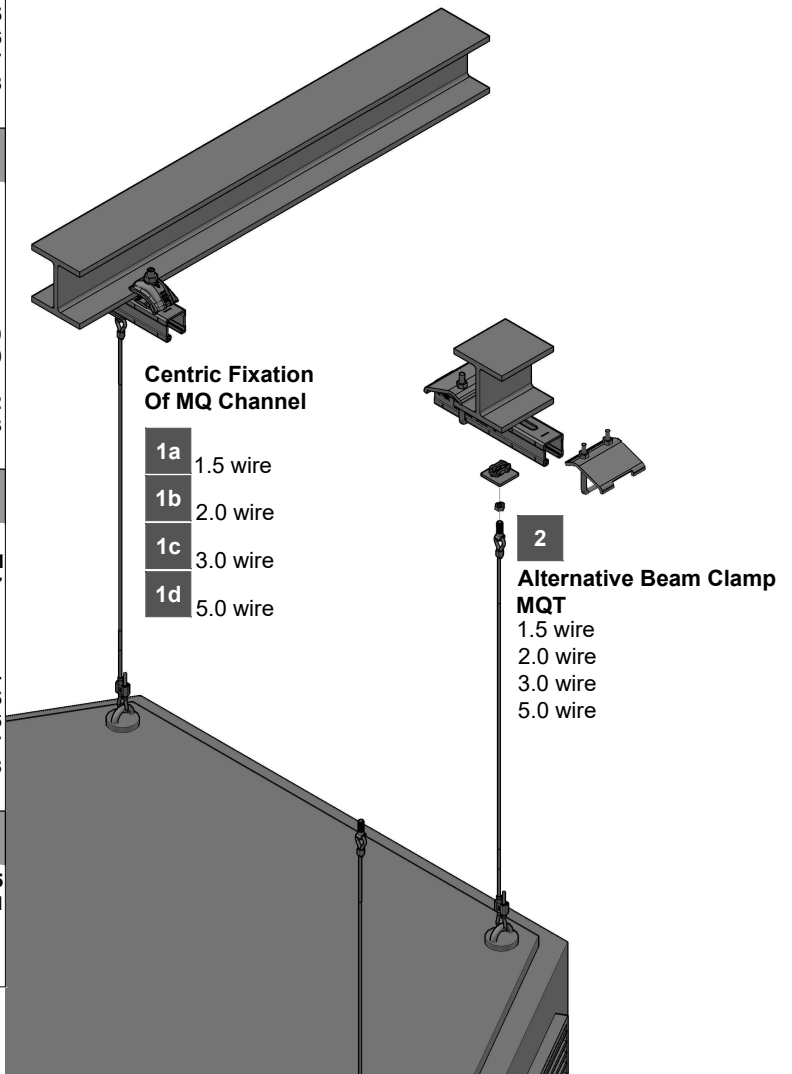


Application description	Application	Product lines	Base material
Wire system - Ventilation Unit Fixed On Structural Steel - MM Channel		Wire system	Structural steel
General comments		Beam Clamps	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the steel beam and all connected parts.</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MM System	



# Ventilation Unit Fixed On Structural Steel Profiles - MQ Channel:

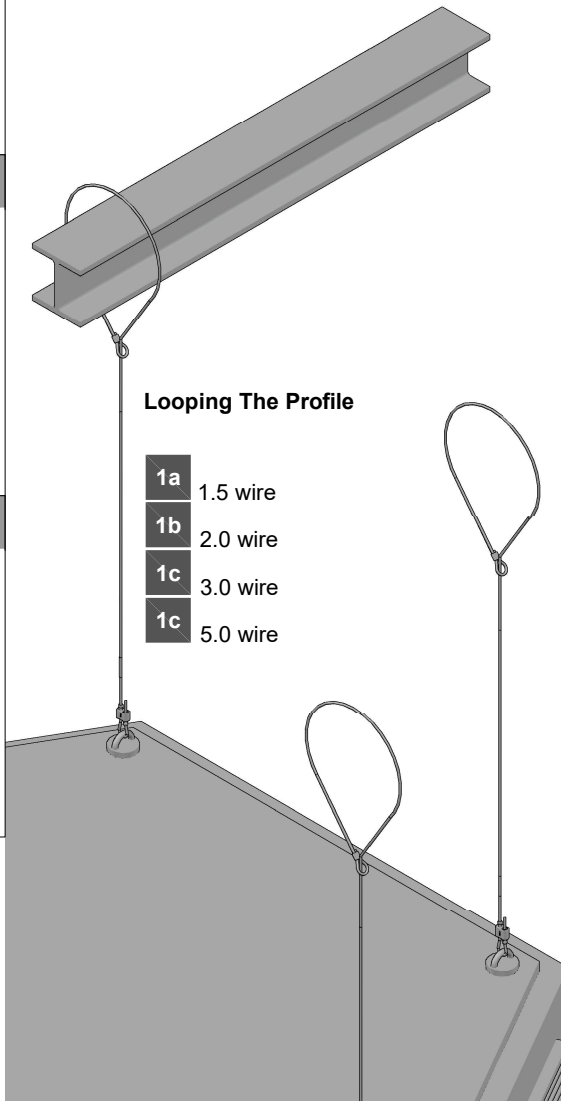
<p><b>1a</b></p> <p>eyebolt combo</p>	<p><b>1a</b> Centric Fixation Of MQ Channel 1.5 wire</p> <p>2x MQT-U beam clamp 2115454 1x MQ-41 3m channel 369591 1x MQA-S-M8 saddle nut 2141906 1x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p>
<p><b>1b</b></p> <p>eyebolt combo</p>	<p><b>1b</b> Centric Fixation Of MQ Channel 2.0 wire</p> <p>2x MQT-U beam clamp 2115454 1x MQ-41 3m channel 369591 1x MQA-S-M8 saddle nut 2141906 1x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p>
<p><b>1c</b></p> <p>eyebolt combo</p>	<p><b>1c</b> Centric Fixation Of MQ Channel 3.0 wire</p> <p>2x MQT-U beam clamp 2115454 1x MQ-41 3m channel 369591 1x MQA-S-M8 saddle nut 2141906 1x M8 nut 2184504</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053</p>
<p><b>1d</b></p> <p>eyebolt combo</p>	<p><b>1d</b> Centric Fixation Of MQ Channel 5.0 wire</p> <p>2x MQT-U beam clamp 2115454 1x MQ-41 3m channel 369591 1x MQA-S-M10 saddle nut 2141907 1x M10 nut 2184505</p> <p>Eyebolt combo 1x eyebolt and lock Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058</p>
<p><b>2</b></p>	<p><b>4</b> Alternative Beam Clamp MQT</p> <p>2x MQT-21-41 beam clamp 369675 1x MQ-41 3m ...m channel 369591</p>



Application description	Application	Product lines	Base material
Wire system - Ventilation Unit Fixed On Structural Steel - MQ Channel	<p><b>4</b></p>	Wire system	Structural steel
General comments		Beam Clamps	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the steel beam and all connected parts.</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MQ Channel	

# Ventilation Unit Fixed On Structural Steel Profiles - Looped:

<p><b>1a</b></p> <p>loop combo</p>	<p><b>1a</b> Looping The Profile 1.5 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <table border="0"> <tr><td>Kit MW-LP L 1.5/1m</td><td>2280072</td></tr> <tr><td>Kit MW-LP L 1.5/2m</td><td>2280073</td></tr> <tr><td>Kit MW-LP L 1.5/3m</td><td>2280074</td></tr> <tr><td>Kit MW-LP L 1.5/5m</td><td>2280075</td></tr> <tr><td>Kit MW-LP L 1.5/10m</td><td>2280076</td></tr> </table>	Kit MW-LP L 1.5/1m	2280072	Kit MW-LP L 1.5/2m	2280073	Kit MW-LP L 1.5/3m	2280074	Kit MW-LP L 1.5/5m	2280075	Kit MW-LP L 1.5/10m	2280076
Kit MW-LP L 1.5/1m	2280072										
Kit MW-LP L 1.5/2m	2280073										
Kit MW-LP L 1.5/3m	2280074										
Kit MW-LP L 1.5/5m	2280075										
Kit MW-LP L 1.5/10m	2280076										
<p><b>1b</b></p> <p>loop combo</p>	<p><b>1b</b> Looping The Profile 2.0 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <table border="0"> <tr><td>Kit MW-LP L 2.0/1m</td><td>2280077</td></tr> <tr><td>Kit MW-LP L 2.0/2m</td><td>2280078</td></tr> <tr><td>Kit MW-LP L 2.0/3m</td><td>2280079</td></tr> <tr><td>Kit MW-LP L 2.0/5m</td><td>2280080</td></tr> <tr><td>Kit MW-LP L 2.0/10m</td><td>2280081</td></tr> </table>	Kit MW-LP L 2.0/1m	2280077	Kit MW-LP L 2.0/2m	2280078	Kit MW-LP L 2.0/3m	2280079	Kit MW-LP L 2.0/5m	2280080	Kit MW-LP L 2.0/10m	2280081
Kit MW-LP L 2.0/1m	2280077										
Kit MW-LP L 2.0/2m	2280078										
Kit MW-LP L 2.0/3m	2280079										
Kit MW-LP L 2.0/5m	2280080										
Kit MW-LP L 2.0/10m	2280081										
<p><b>1c</b></p> <p>loop combo</p>	<p><b>1c</b> Looping The Profile 3.0 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <table border="0"> <tr><td>Kit MW-LP L 3.0/1m</td><td>2280082</td></tr> <tr><td>Kit MW-LP L 3.0/2m</td><td>2280083</td></tr> <tr><td>Kit MW-LP L 3.0/3m</td><td>2280084</td></tr> <tr><td>Kit MW-LP L 3.0/5m</td><td>2280085</td></tr> <tr><td>Kit MW-LP L 3.0/10m</td><td>2280086</td></tr> </table>	Kit MW-LP L 3.0/1m	2280082	Kit MW-LP L 3.0/2m	2280083	Kit MW-LP L 3.0/3m	2280084	Kit MW-LP L 3.0/5m	2280085	Kit MW-LP L 3.0/10m	2280086
Kit MW-LP L 3.0/1m	2280082										
Kit MW-LP L 3.0/2m	2280083										
Kit MW-LP L 3.0/3m	2280084										
Kit MW-LP L 3.0/5m	2280085										
Kit MW-LP L 3.0/10m	2280086										
<p><b>1d</b></p> <p>loop combo</p>	<p><b>1d</b> Looping The Profile 5.0 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <table border="0"> <tr><td>Kit MW-LP L 5.0/1m</td><td>2287096</td></tr> <tr><td>Kit MW-LP L 5.0/2m</td><td>2287097</td></tr> <tr><td>Kit MW-LP L 5.0/3m</td><td>2287098</td></tr> <tr><td>Kit MW-LP L 5.0/5m</td><td>2287099</td></tr> <tr><td>Kit MW-LP L 5.0/10m</td><td>2287580</td></tr> </table>	Kit MW-LP L 5.0/1m	2287096	Kit MW-LP L 5.0/2m	2287097	Kit MW-LP L 5.0/3m	2287098	Kit MW-LP L 5.0/5m	2287099	Kit MW-LP L 5.0/10m	2287580
Kit MW-LP L 5.0/1m	2287096										
Kit MW-LP L 5.0/2m	2287097										
Kit MW-LP L 5.0/3m	2287098										
Kit MW-LP L 5.0/5m	2287099										
Kit MW-LP L 5.0/10m	2287580										



Application description	Application	Product lines	Base material
Wire system - Ventilation Unit Fixed On Structural Steel - Looped	<b>4</b>	Wire system	Structural steel
<b>General comments</b>			
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the structural steel and all connected parts.</li> <li>Sharp edges must be avoided to prevent damage to the wire.</li> </ul>			

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# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On a Concrete Slab:

1a		1a	Screw anchor, M8 support 1.5 wire		2a	Flush anchor, M8 support 1.5, 2.0, 3.0 wire
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 376959 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504		1x	
1b		1b	Screw anchor, M8 support 2.0 wire		2d	Flush anchor, M10 support 5.0 wire
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 376959 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504		1x	
1c		1c	Screw anchor, M8 support 3.0 wire			
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 376959 HUS-I 6x55 M8/M10 anchor 423180 M8 nut 2184504			
1d		1d	Screw anchor, M10 support 5.0 wire			
		1x	screw anchor HUS-I 6x35 M8/M10 anchor 376959 HUS-I 6x55 M8/M10 anchor 423180 M10 nut 2184505			

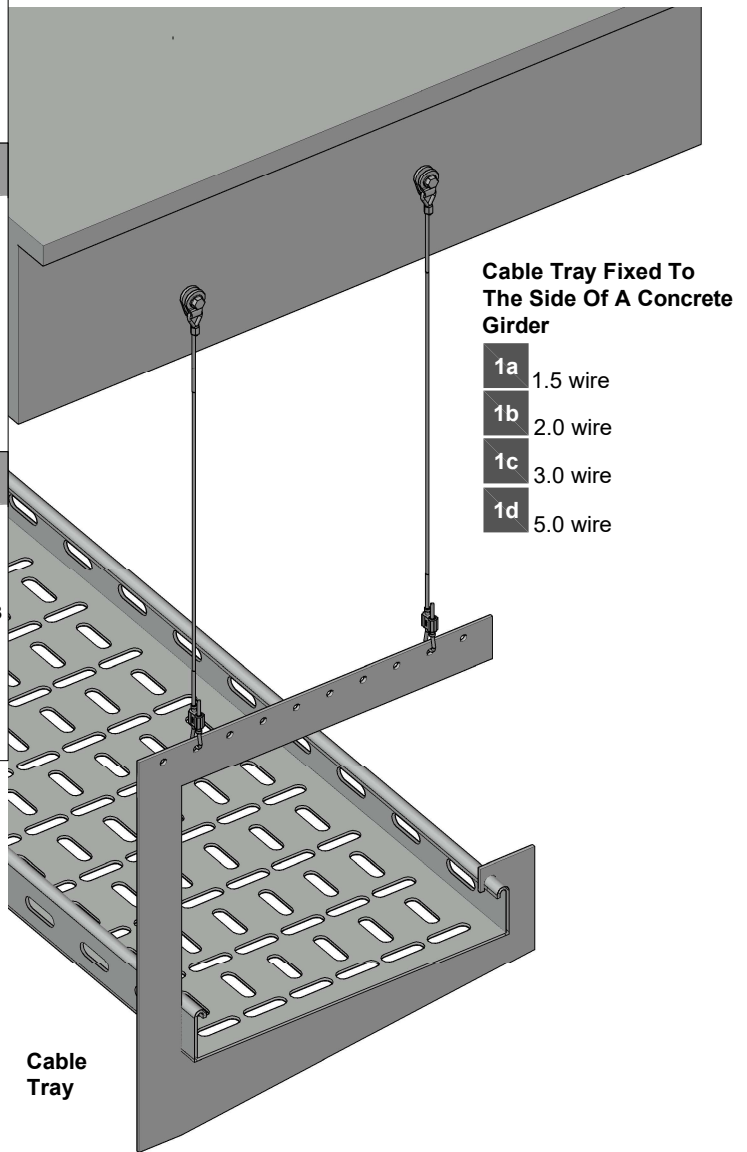
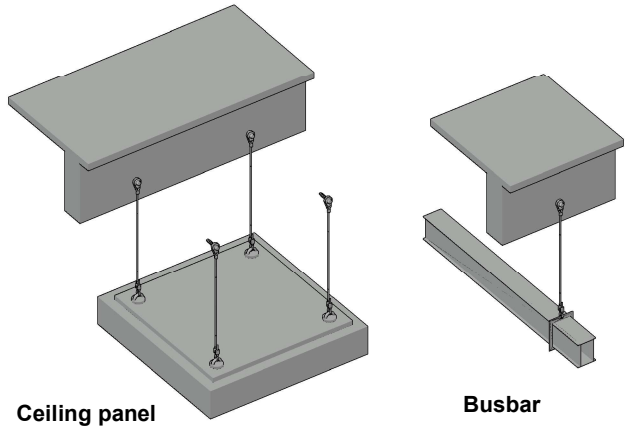
Application description	Application	Product lines	Base material
Wire system - Electrical - Cable Tray, Ceiling Panel and Busbar On Concrete Slab		5	Wire system
General comments		5	Anchors
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the anchor within the chosen base material and all connected parts.</li> <li>Only for vertically suspended loads. Eye-bolt not suitable for bracing.</li> </ul>			

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# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On a Concrete Girder:

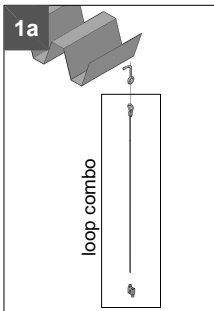
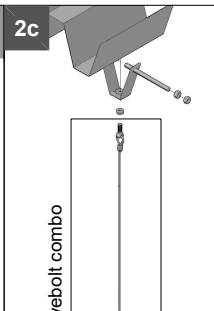
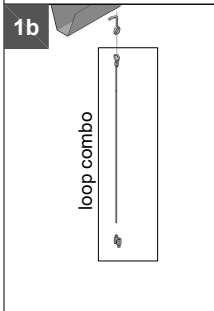
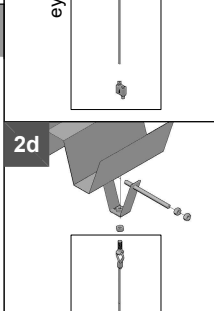
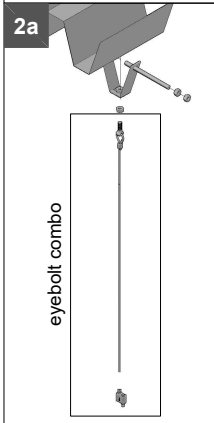
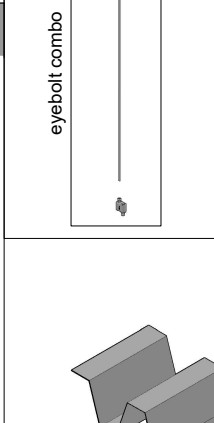
<p><b>1a</b></p> <p>loop combo</p>	<p><b>1a</b> Clip Attachement 1.5 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076</p>
<p><b>1b</b></p> <p>loop combo</p>	<p><b>1b</b> Clip Attachement 2.0 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081</p>
<p><b>1c</b></p> <p>loop combo</p>	<p><b>1c</b> Clip Attachement 3.0 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 3.0/1m 2280082 Kit MW-LP L 3.0/2m 2280083 Kit MW-LP L 3.0/3m 2280084 Kit MW-LP L 3.0/5m 2280085 Kit MW-LP L 3.0/10m 2280086</p>
<p><b>1d</b></p> <p>loop combo</p>	<p><b>1d</b> Clip Attachement 5.0 wire</p> <p><b>Anchor</b> 1x HUS3-H 8x75 25/15/5 anchor 2079796 HST3 M10x90 30/10 anchor 2105712</p> <p><b>Clip</b> 1x MW-C clip 2287563</p> <p><b>Loop combo</b> 1x Kit MW-LP L 5.0/1m 2287096 Kit MW-LP L 5.0/2m 2287097 Kit MW-LP L 5.0/3m 2287098 Kit MW-LP L 5.0/5m 2287099 Kit MW-LP L 5.0/10m 2287580</p>

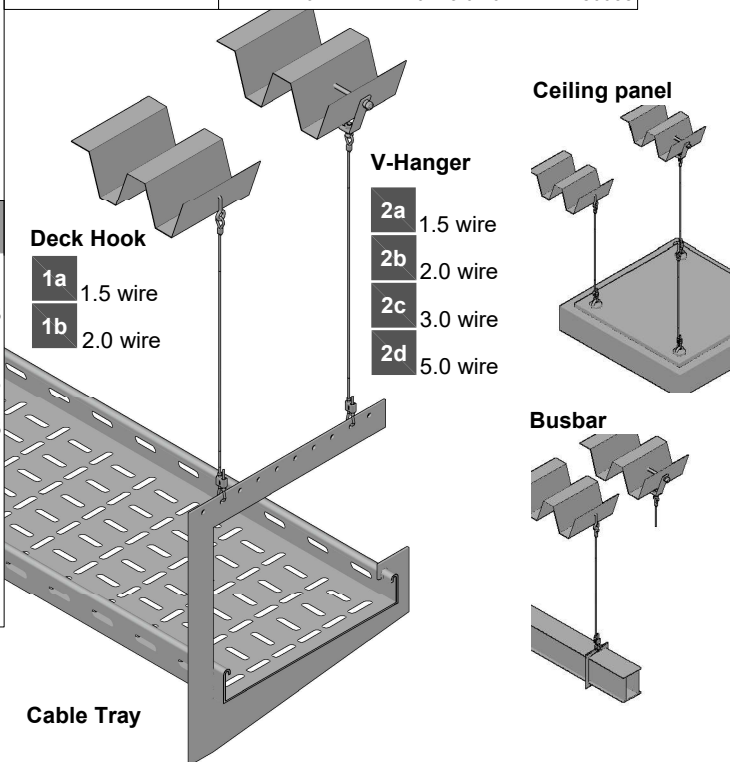


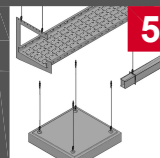
Application description	Application	Product lines	Base material
Wire system - Electrical - Cable Tray, Ceiling Panel and Busbar On Concr. Girder	<p><b>5</b></p>	Wire system	Concrete
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts and the anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor.</li> <li>Only one wire may be suspended on each clip.</li> </ul>		Anchors	

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# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On Metal Deck:

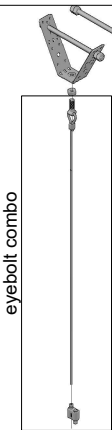
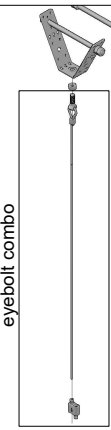
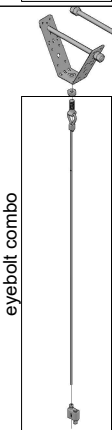
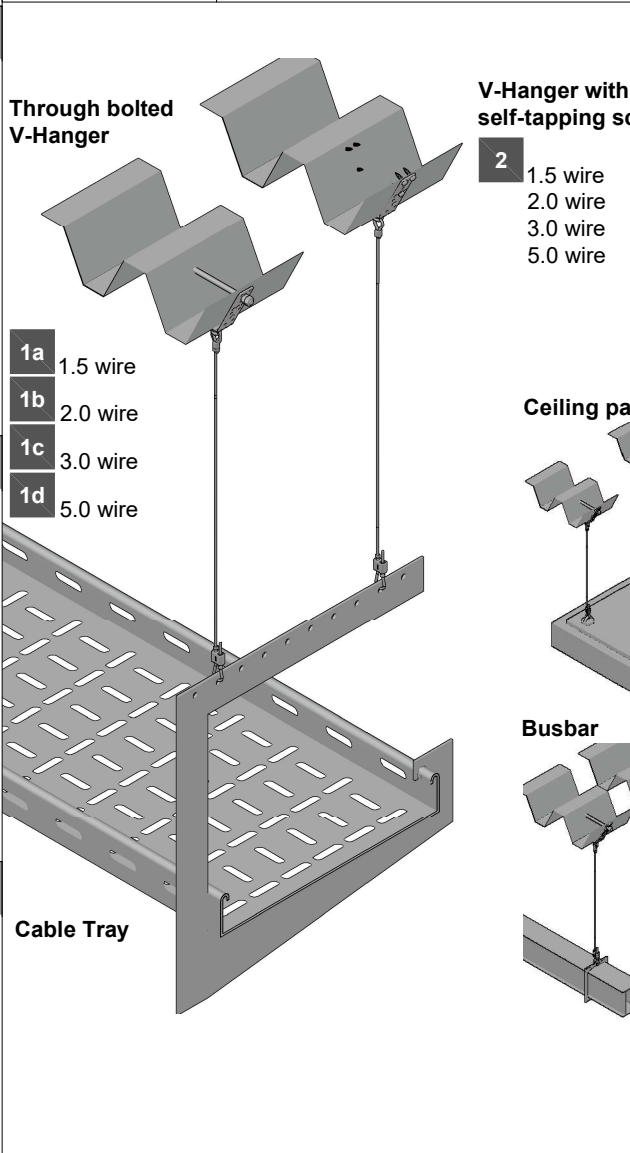
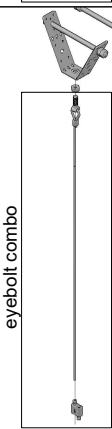
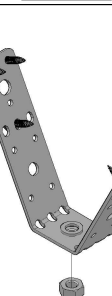
	<p><b>1a</b> Deck hook 1.5 wire</p> <p><b>Deck hook</b> 1x MW-DH deck hook 2277567</p> <p><b>Loop combo</b> 1x loop and lock</p> <p>Kit MW-LP L 1.5/1m 2280072 Kit MW-LP L 1.5/2m 2280073 Kit MW-LP L 1.5/3m 2280074 Kit MW-LP L 1.5/5m 2280075 Kit MW-LP L 1.5/10m 2280076</p>		<p><b>2c</b> Through bolted V-hanger 3.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 216465</p> <p><b>Through-bolt version 1-t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock</p> <p>Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053</p>
	<p><b>1b</b> Deck hook 2.0 wire</p> <p><b>Deck hook</b> 1x MW-DH deck hook 2277567</p> <p><b>Loop combo</b> 1x loop and lock</p> <p>Kit MW-LP L 2.0/1m 2280077 Kit MW-LP L 2.0/2m 2280078 Kit MW-LP L 2.0/3m 2280079 Kit MW-LP L 2.0/5m 2280080 Kit MW-LP L 2.0/10m 2280081</p>		<p><b>2d</b> Through bolted V-hanger 5.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M10 V-hanger 229007 1x M10 nut 2184505</p> <p><b>Through-bolt version 1-t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock</p> <p>Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058</p>
	<p><b>2a</b> Through bolted V-hanger 1.5 wire</p> <p><b>AV-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 216465</p> <p><b>Through-bolt version 1-t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock</p> <p>Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p>		<p><b>2b</b> Through bolted V-hanger 2.0 wire</p> <p><b>V-Hanger</b> 1x MF-TSH M8 V-hanger 229006 1x M8 nut 216465</p> <p><b>Through-bolt version 1-t-rod</b> 1x AM8x1000 fixed t-rod 339793 4x M8 nut 216465</p> <p><b>Through-bolt ver. 2-long h-head screw</b> 1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 216465</p> <p><b>Eyebolt combo</b> 1x eyebolt and lock</p> <p>Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p>

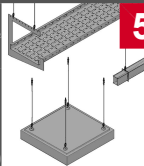


Application description	Application	Product lines	Base material
Wire system - Electrical - Cable Tray, Ceiling Panel and Busbar On Metal Deck	 <b>5</b>	Wire system V-Hangers	Metal Deck
<b>General comments</b>			
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and all connected parts.</li> <li>The deck hook must hang vertically from the deck.</li> <li>Only one wire may be suspended on each deck hook.</li> </ul>			

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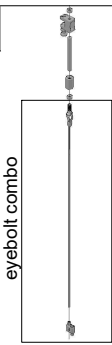
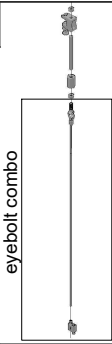
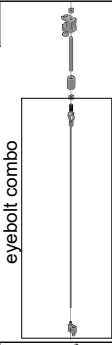
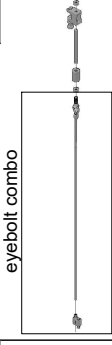
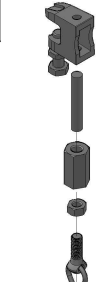
# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On Metal Deck - V-hanger with Integrated Nut:

 <p>1a</p>	<p><b>1a</b> Through bolted V-Hanger 1.5 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b></p> <p>1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043</p>	 <p>1d</p>	<p><b>1d</b> Through bolted V-Hanger 5.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M10 V-hanger 386559 1x M10 nut 2184505</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b></p> <p>1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058</p>
 <p>1b</p>	<p><b>1b</b> Through bolted V-Hanger 2.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b></p> <p>1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048</p>	 <p><b>Through bolted V-Hanger</b></p> <p><b>V-Hanger with self-tapping screws</b></p> <p>2 1.5 wire 2 2.0 wire 2 3.0 wire 2 5.0 wire</p> <p><b>Cable Tray</b></p> <p><b>Ceiling panel</b></p> <p><b>Busbar</b></p>	
 <p>1c</p>	<p><b>1c</b> Through bolted V-Hanger 3.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 1x M8 nut 2184504</p> <p><b>Through-bolt version 1-t-rod</b></p> <p>1x AM8x1000 fixed t-rod 339793 4x M8 nut 2184504</p> <p><b>Through-bolt ver. 2-long h-head screw</b></p> <p>1x M8x120 4.8 hex. head sc. 2063165 2x M8 nut 2184504</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053</p>		
 <p>2</p>	<p><b>2</b> V-Hanger With Self-Tapping Screws 1.5, 2.0, 3.0 and 5.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MVA-MS M8 V-hanger 386558 1x MVA-MS M10 V-hanger 386559</p> <p><b>Self-tapping screws</b></p> <p>6x S-MS 01Z 4.0x13 S-screw 406471</p> <p><b>Securing nut</b></p> <p>1x M8 nut 2184504 1x M10 nut 2184505</p>		

Application description	Application	Product lines	Base material
Wire system - Electrical - Cable Tray, Ceiling Panel and Busbar On Metal Deck	 5	Wire system	Metal Deck
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the metal deck and all connected parts.</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		V-Hangers	

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# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On Structural Steel Profiles - Beam Clamps:

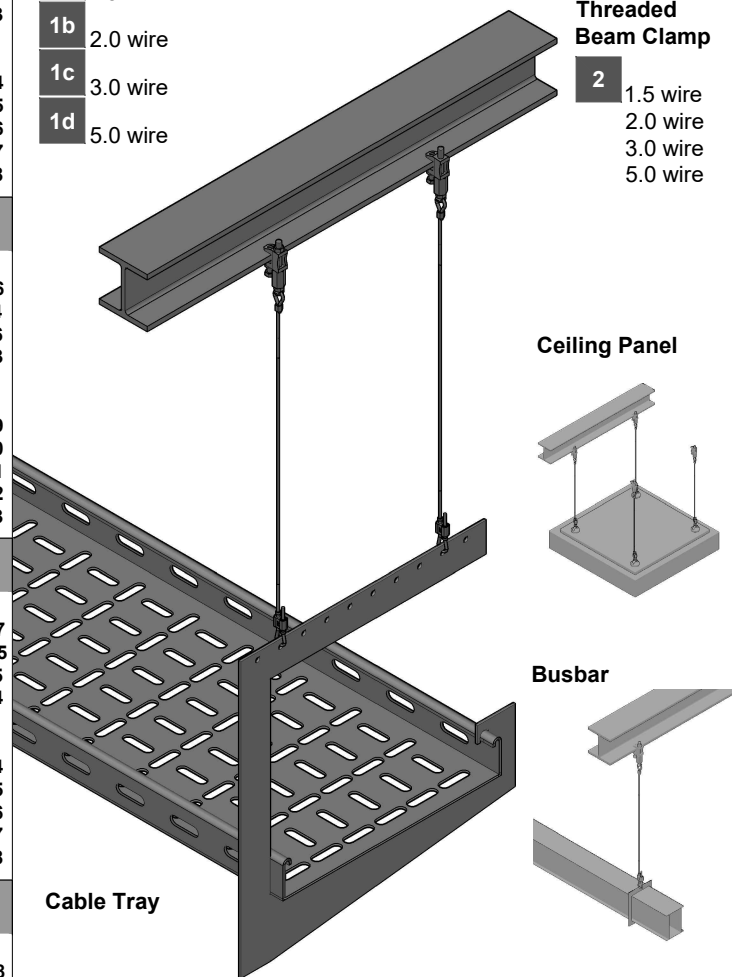
<p><b>1a</b></p>  <p>eyebolt combo</p>	<p><b>1a</b> Unthreaded Beam Clamp 1.5 wire</p> <p><b>Beam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 1.5/1m 2280019</p> <p>Kit MW-EB M8 L 1.5/2m 2280040</p> <p>Kit MW-EB M8 L 1.5/3m 2280041</p> <p>Kit MW-EB M8 L 1.5/5m 2280042</p> <p>Kit MW-EB M8 L 1.5/10m 2280043</p>
<p><b>1b</b></p>  <p>eyebolt combo</p>	<p><b>1b</b> Unthreaded Beam Clamp 2.0 wire</p> <p><b>Beam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 2.0/1m 2280044</p> <p>Kit MW-EB M8 L 2.0/2m 2280045</p> <p>Kit MW-EB M8 L 2.0/3m 2280046</p> <p>Kit MW-EB M8 L 2.0/5m 2280047</p> <p>Kit MW-EB M8 L 2.0/10m 2280048</p>
<p><b>1c</b></p>  <p>eyebolt combo</p>	<p><b>1c</b> Unthreaded Beam Clamp 3.0 wire</p> <p><b>VBeam clamp</b></p> <p>1x MAB-9 beam clamp 375956</p> <p>2x M8 nut 2184504</p> <p>1x M8x1000 4.8 threaded rod 2140926</p> <p>1x M8x25 coupler 216703</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M8 L 3.0/1m 2280049</p> <p>Kit MW-EB M8 L 3.0/2m 2280050</p> <p>Kit MW-EB M8 L 3.0/3m 2280051</p> <p>Kit MW-EB M8 L 3.0/5m 2280052</p> <p>Kit MW-EB M8 L 3.0/10m 2280053</p>
<p><b>1d</b></p>  <p>eyebolt combo</p>	<p><b>1d</b> Unthreaded Beam Clamp 5.0 wire</p> <p><b>V-Hanger</b></p> <p>1x MAB-11 375957</p> <p>2x M10 nut 2184505</p> <p>1x M10x1000 4.8 threaded rod 339795</p> <p>1x M10x30 coupler 216704</p> <p><b>Eyebolt combo</b></p> <p>1x eyebolt and lock</p> <p>Kit MW-EB M10 L 5.0/1m 2280054</p> <p>Kit MW-EB M10 L 5.0/2m 2280055</p> <p>Kit MW-EB M10 L 5.0/3m 2280056</p> <p>Kit MW-EB M10 L 5.0/5m 2280057</p> <p>Kit MW-EB M10 L 5.0/10m 2280058</p>
<p><b>2</b></p> 	<p><b>2</b> Threaded Beam Clamp</p> <p><b>Threaded Beam Clamp</b></p> <p>1x MAB-M8 2006878</p> <p>MAB-M10 2006879</p> <p>MAB-M12 2007210</p>

## Unthreaded Beam Clamp

<b>1a</b>	1.5 wire
<b>1b</b>	2.0 wire
<b>1c</b>	3.0 wire
<b>1d</b>	5.0 wire

## Threaded Beam Clamp

<b>2</b>	1.5 wire
	2.0 wire
	3.0 wire
	5.0 wire



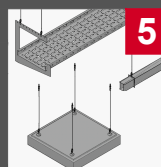
### Application description

Wire system - Cable Tray, Ceiling Panel and Busbar Fixed On Steel-Beam Clamps

### General comments

- Loading must always be compared with the capacity of the beam clamp and structural steel and all connected parts.
- Only for vertically suspended loads. Not suitable for bracing.

### Application



**5**

### Product lines

Wire system

Beam Clamps

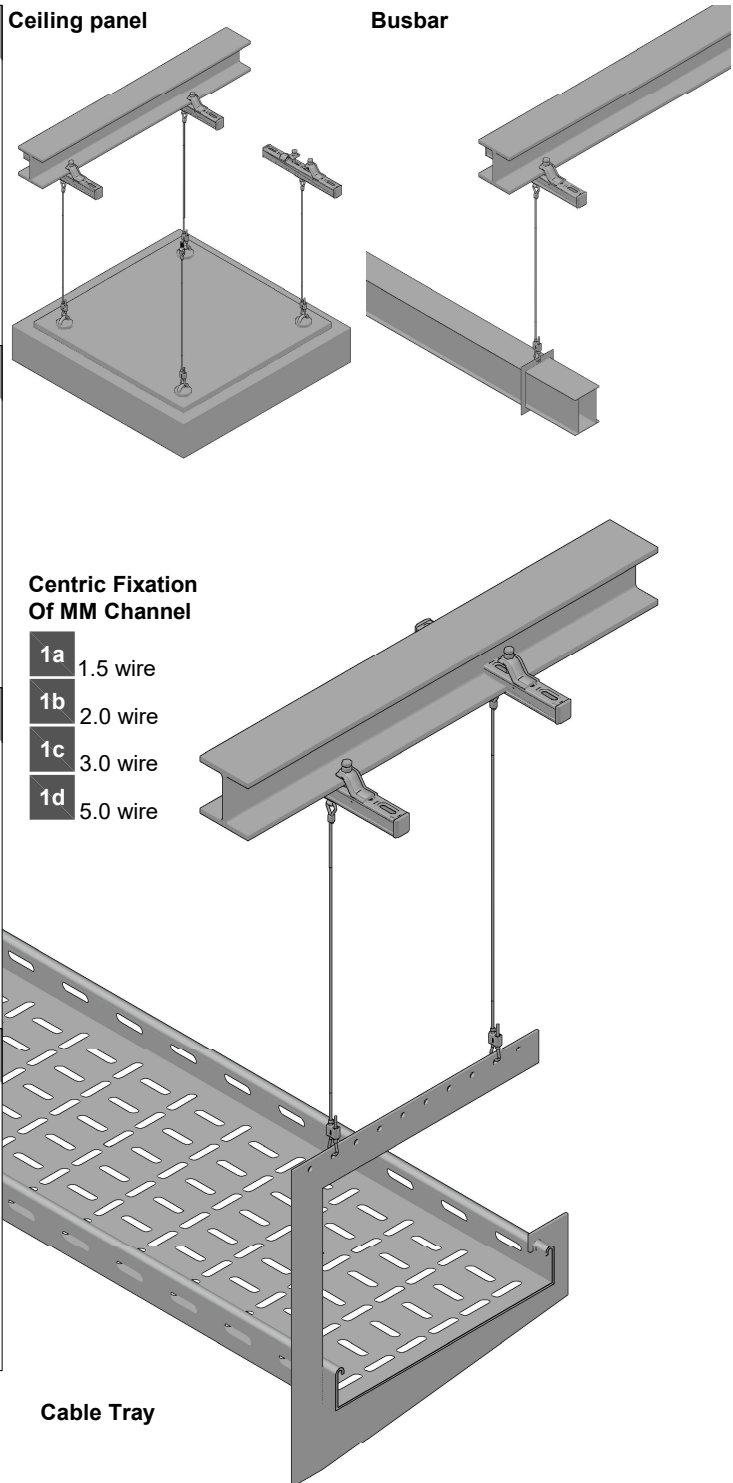
### Base material

Structural steel



# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On Structural Steel Profiles - MM Channel:

 eyebolt combo	<b>1a</b> Centric Fixation Of MM Channel 1.5 wire 2x MM-T-16-36 beam clamps 418763 1x MM-C-30 2m .....m channel 418749 1x MM-S M8 saddle nut 418760 1x M8 nut 216465 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m 2280019 Kit MW-EB M8 L 1.5/2m 2280040 Kit MW-EB M8 L 1.5/3m 2280041 Kit MW-EB M8 L 1.5/5m 2280042 Kit MW-EB M8 L 1.5/10m 2280043
	<b>1b</b> Centric Fixation Of MM Channel 2.0 wire 2x MM-T-16-36 beam clamps 418763 1x MM-C-30 2m .....m channel 418749 1x MM-S M8 saddle nut 418760 1x M8 nut 216465 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m 2280044 Kit MW-EB M8 L 2.0/2m 2280045 Kit MW-EB M8 L 2.0/3m 2280046 Kit MW-EB M8 L 2.0/5m 2280047 Kit MW-EB M8 L 2.0/10m 2280048
	<b>1c</b> Centric Fixation Of MM Channel 3.0 wire 2x MM-T-16-36 beam clamps 418763 1x MM-C-30 2m .....m channel 418749 1x MM-S M8 saddle nut 418760 1x M8 nut 216465 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 3.0/1m 2280049 Kit MW-EB M8 L 3.0/2m 2280050 Kit MW-EB M8 L 3.0/3m 2280051 Kit MW-EB M8 L 3.0/5m 2280052 Kit MW-EB M8 L 3.0/10m 2280053
	<b>1d</b> Centric Fixation Of MM Channel 5.0 wire 2x MM-T-16-36 beam clamps 418763 1x MM-C-30 2m .....m channel 418749 1x MM-S M10 saddle nut 418761 1x M10 nut 2184505 Eyebolt combo 1x eyebolt and lock Kit MW-EB M10 L 5.0/1m 2280054 Kit MW-EB M10 L 5.0/2m 2280055 Kit MW-EB M10 L 5.0/3m 2280056 Kit MW-EB M10 L 5.0/5m 2280057 Kit MW-EB M10 L 5.0/10m 2280058



Application description	Application	Product lines	Base material
Wire system - Electrical - Cable Tray, Ceiling P. and Busbar On Steel MM Cahnnel	<b>5</b>	Wire system	Structural steel
<b>General comments</b>		Beam Clamps	
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of structural steel and all connected parts</li> <li>Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MM System	

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# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On Structural Steel Profiles - MQ Channel:

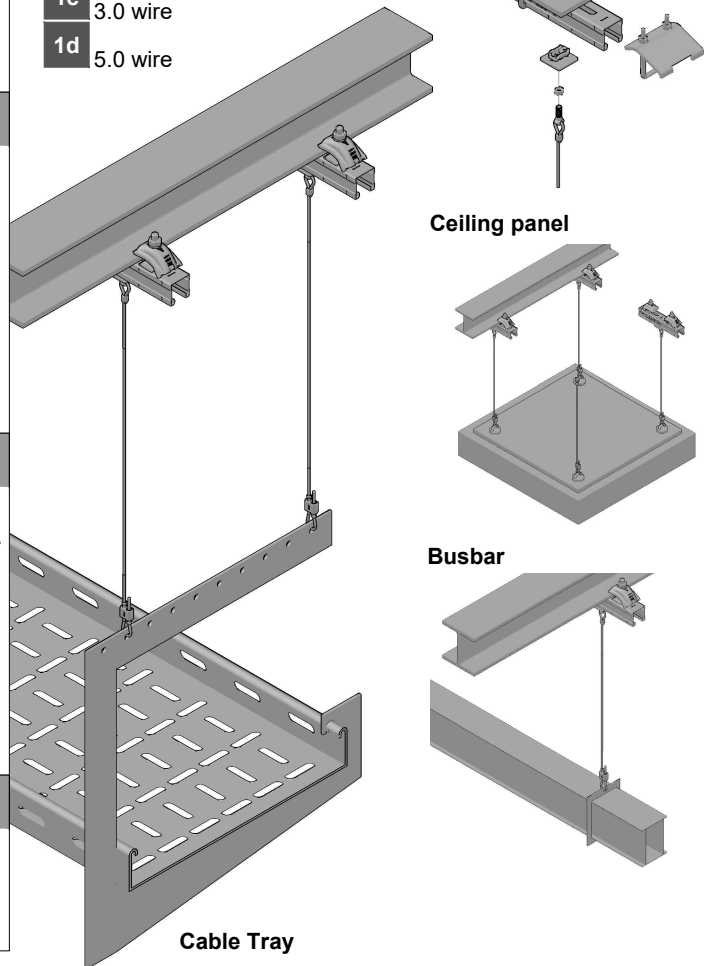
<p>1a</p>	<p><b>1a</b> Centric Fixation Of MQ Channel 1.5 wire</p> <p>2x MQT-U beam clamp      2115454 1x MQ-41 3m channel      369591 1x MQA-S-M8 saddle nut      2141906 1x M8 nut      2184504 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 1.5/1m      2280019 Kit MW-EB M8 L 1.5/2m      2280040 Kit MW-EB M8 L 1.5/3m      2280041 Kit MW-EB M8 L 1.5/5m      2280042 Kit MW-EB M8 L 1.5/10m      2280043</p>
<p>1b</p>	<p><b>1b</b> Centric Fixation Of MQ Channel 2.0 wire</p> <p>2x MQT-U beam clamp      2115454 1x MQ-41 3m channel      369591 1x MQA-S-M8 saddle nut      2141906 1x M8 nut      2184504 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 2.0/1m      2280044 Kit MW-EB M8 L 2.0/2m      2280045 Kit MW-EB M8 L 2.0/3m      2280046 Kit MW-EB M8 L 2.0/5m      2280047 Kit MW-EB M8 L 2.0/10m      2280048</p>
<p>1c</p>	<p><b>1c</b> Centric Fixation Of MQ Channel 3.0 wire</p> <p>2x MQT-U beam clamp      2115454 1x MQ-41 3m channel      369591 1x MQA-S-M8 saddle nut      2141906 1x M8 nut      2184504 Eyebolt combo 1x eyebolt and lock Kit MW-EB M8 L 3.0/1m      2280049 Kit MW-EB M8 L 3.0/2m      2280050 Kit MW-EB M8 L 3.0/3m      2280051 Kit MW-EB M8 L 3.0/5m      2280052 Kit MW-EB M8 L 3.0/10m      2280053</p>
<p>1d</p>	<p><b>1d</b> Centric Fixation Of MQ Channel 5.0 wire</p> <p>2x MQT-U beam clamp      2115454 1x MQ-41 3m channel      369591 1x MQA-S-M10 saddle nut      2141907 1x M10 nut      2184505 Eyebolt combo 1x eyebolt and lock Kit MW-EB M10 L 5.0/1m      2280054 Kit MW-EB M10 L 5.0/2m      2280055 Kit MW-EB M10 L 5.0/3m      2280056 Kit MW-EB M10 L 5.0/5m      2280057 Kit MW-EB M10 L 5.0/10m      2280058</p>
<p>2</p>	<p><b>2</b> Alternative Beam Clamp MQT</p> <p>2x MQT-21-41 beam clamp      369675 1x MQ-41 3m ...m channel      369591</p>

## Centric Fixation Of MQ Channel

- 1a 1.5 wire
- 1b 2.0 wire
- 1c 3.0 wire
- 1d 5.0 wire

## 2 Alternative Beam Clamps MQT

- 1.5 wire
- 2.0 wire
- 3.0 wire
- 5.0 wire

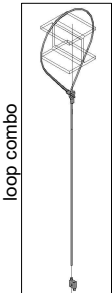
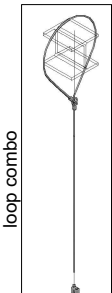
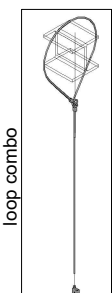
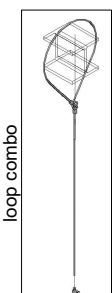


Application description	Application	Product lines	Base material
Wire system - Electrical - Cable Tray, Ceiling P. and Busbar On Steel-MQ Channel	<p>5</p>	Wire system	Structural steel
General comments		Beam Clamps	
<ul style="list-style-type: none"> <li>• Loading must always be compared with the capacity of the structural steel and all connected parts.</li> <li>• Only for vertically suspended loads. Not suitable for bracing.</li> </ul>		MQ Channel	

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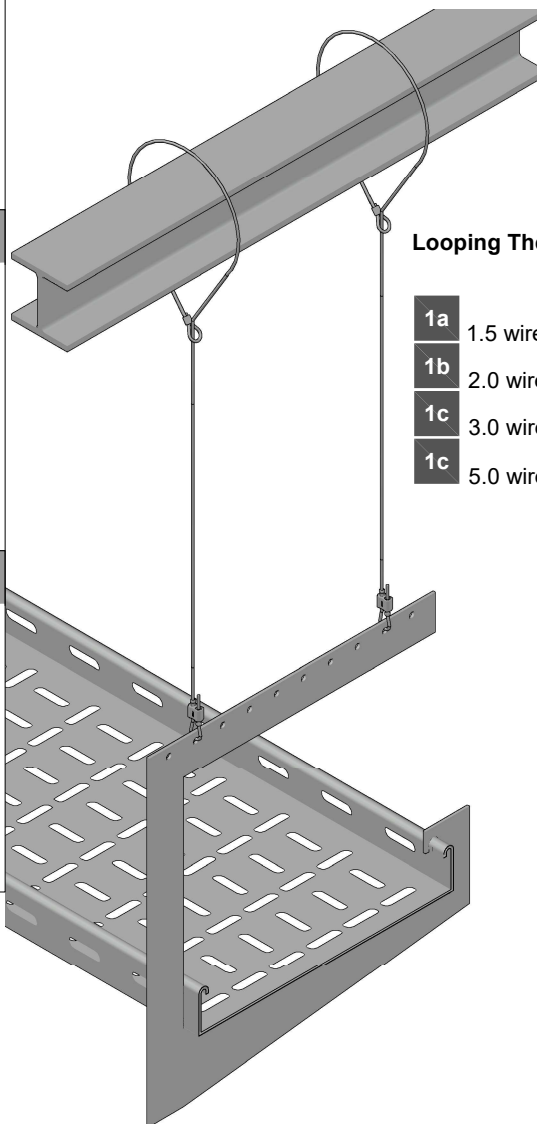
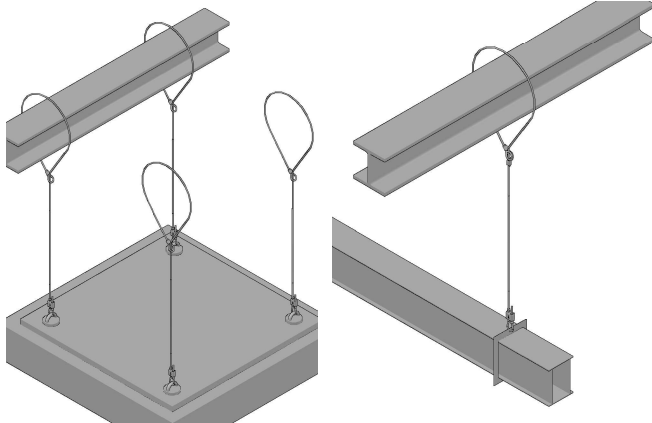


# Electrical - Cable Tray, Ceiling Panel and Busbar Fixed On Structural Steel Profiles - Looped:

<p><b>1a</b></p>  <p>loop combo</p>	<p><b>1a</b> Looping The Profile 1.5 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <p>Kit MW-LP L 1.5/1m      2280072          Kit MW-LP L 1.5/2m      2280073          Kit MW-LP L 1.5/3m      2280074          Kit MW-LP L 1.5/5m      2280075          Kit MW-LP L 1.5/10m     2280076</p>
<p><b>1b</b></p>  <p>loop combo</p>	<p><b>1b</b> Looping The Profile 2.0 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <p>Kit MW-LP L 2.0/1m      2280077          Kit MW-LP L 2.0/2m      2280078          Kit MW-LP L 2.0/3m      2280079          Kit MW-LP L 2.0/5m      2280080          Kit MW-LP L 2.0/10m     2280081</p>
<p><b>1c</b></p>  <p>loop combo</p>	<p><b>1c</b> Looping The Profile 3.0 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <p>Kit MW-LP L 3.0/1m      2280082          Kit MW-LP L 3.0/2m      2280083          Kit MW-LP L 3.0/3m      2280084          Kit MW-LP L 3.0/5m      2280085          Kit MW-LP L 3.0/10m     2280086</p>
<p><b>1d</b></p>  <p>loop combo</p>	<p><b>1d</b> Looping The Profile 5.0 wire</p> <p><b>Loop combo</b> 1x loop and lock</p> <p>Kit MW-LP L 5.0/1m      2287096          Kit MW-LP L 5.0/2m      2287097          Kit MW-LP L 5.0/3m      2287098          Kit MW-LP L 5.0/5m      2287099          Kit MW-LP L 5.0/10m     2287580</p>

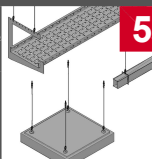
Ceiling panel

Busbar



Looping The Profile

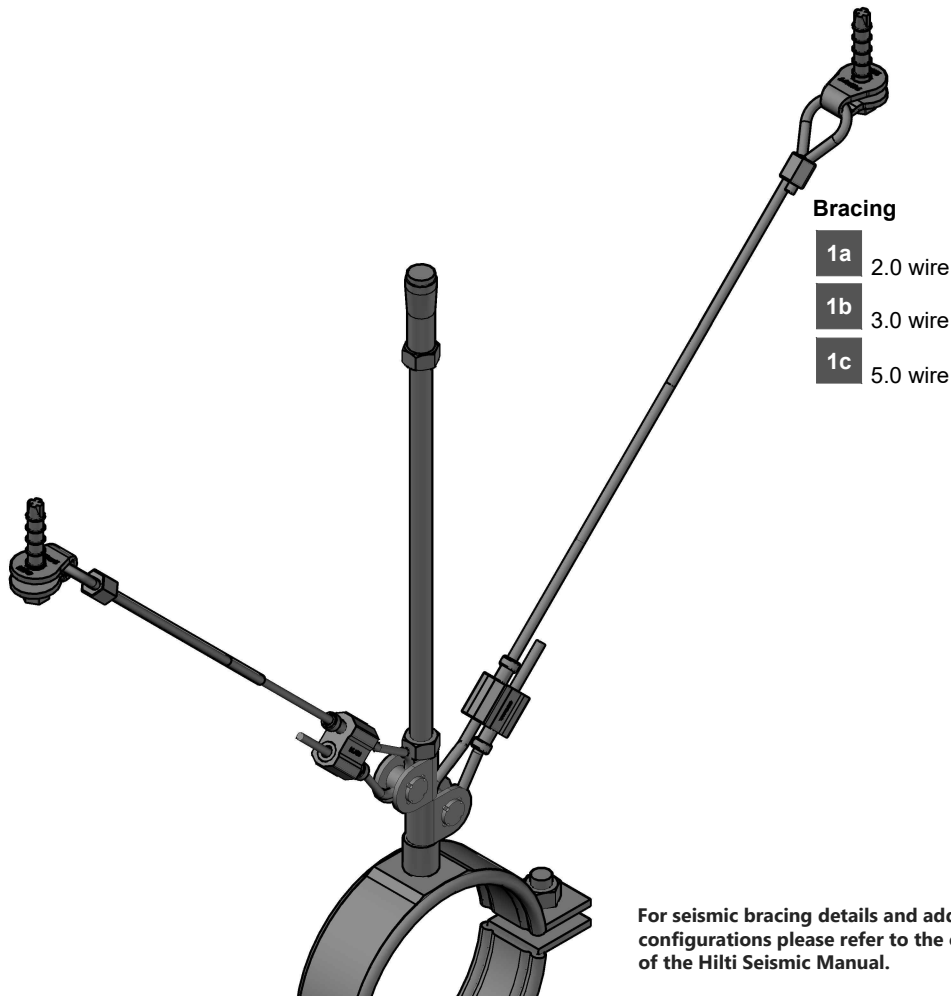
- 1a** 1.5 wire
- 1b** 2.0 wire
- 1c** 3.0 wire
- 1c** 5.0 wire

Application description	Application	Product lines	Base material
Wire system - Electrical - Cable Tray, Ceiling Panel and Busbar On Steel - Looped	 <p><b>5</b></p>	Wire system	Structural steel
<p><b>General comments</b></p> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of the structural steel and all connected parts.</li> <li>Sharp edges must be avoided to prevent damage to the wire</li> </ul>			

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# Bracing - Single Fastening Point on Concrete Slab:

1a Bracing 2.0 wire		1b Bracing 3.0 wire		1c Bracing 5.0 wire		1a-c
<b>Anchor</b>		<b>Anchor</b>		<b>Anchor</b>		
1x HUS3-H 8x75 25/15/5 anchor	2079796	1x HUS3-H 8x75 25/15/5 anchor	2079796	1x HUS3-H 8x75 25/15/5 anchor	2079796	
HST3 M10x90 30/10 anchor	2105712	HST3 M10x90 30/10 anchor	2105712	HST3 M10x90 30/10 anchor	2105712	
<b>Clip</b>		<b>Clip</b>		<b>Clip</b>		
1x MW-C clip	2287563	1x MW-C clip	2287563	1x MW-C clip	2287563	
<b>Loop combo</b>		<b>Loop combo</b>		<b>Loop combo</b>		
<b>1x loop and lock</b>		<b>1x loop and lock</b>		<b>1x loop and lock</b>		
Kit MW-LP L 2.0/1m	2280077	Kit MW-LP L 3.0/1m	2280082	Kit MW-LP L 5.0/1m	2287096	
Kit MW-LP L 2.0/2m	2280078	Kit MW-LP L 3.0/2m	2280083	Kit MW-LP L 5.0/2m	2287097	
Kit MW-LP L 2.0/3m	2280079	Kit MW-LP L 3.0/3m	2280084	Kit MW-LP L 5.0/3m	2287098	
Kit MW-LP L 2.0/5m	2280080	Kit MW-LP L 3.0/5m	2280085	Kit MW-LP L 5.0/5m	2287099	
Kit MW-LP L 2.0/10m	2280081	Kit MW-LP L 3.0/10m	2280086	Kit MW-LP L 5.0/10m	2287580	
<b>Seismic hinge</b>		<b>Seismic hinge</b>		<b>Seismic hinge</b>		
1x MQS-HR-8	2330877	1x MQS-HR-8	2330877	1x MQS-HR-8	2330877	
1x MQS-HR-10	2330878	1x MQS-HR-10	2330878	1x MQS-HR-10	2330878	



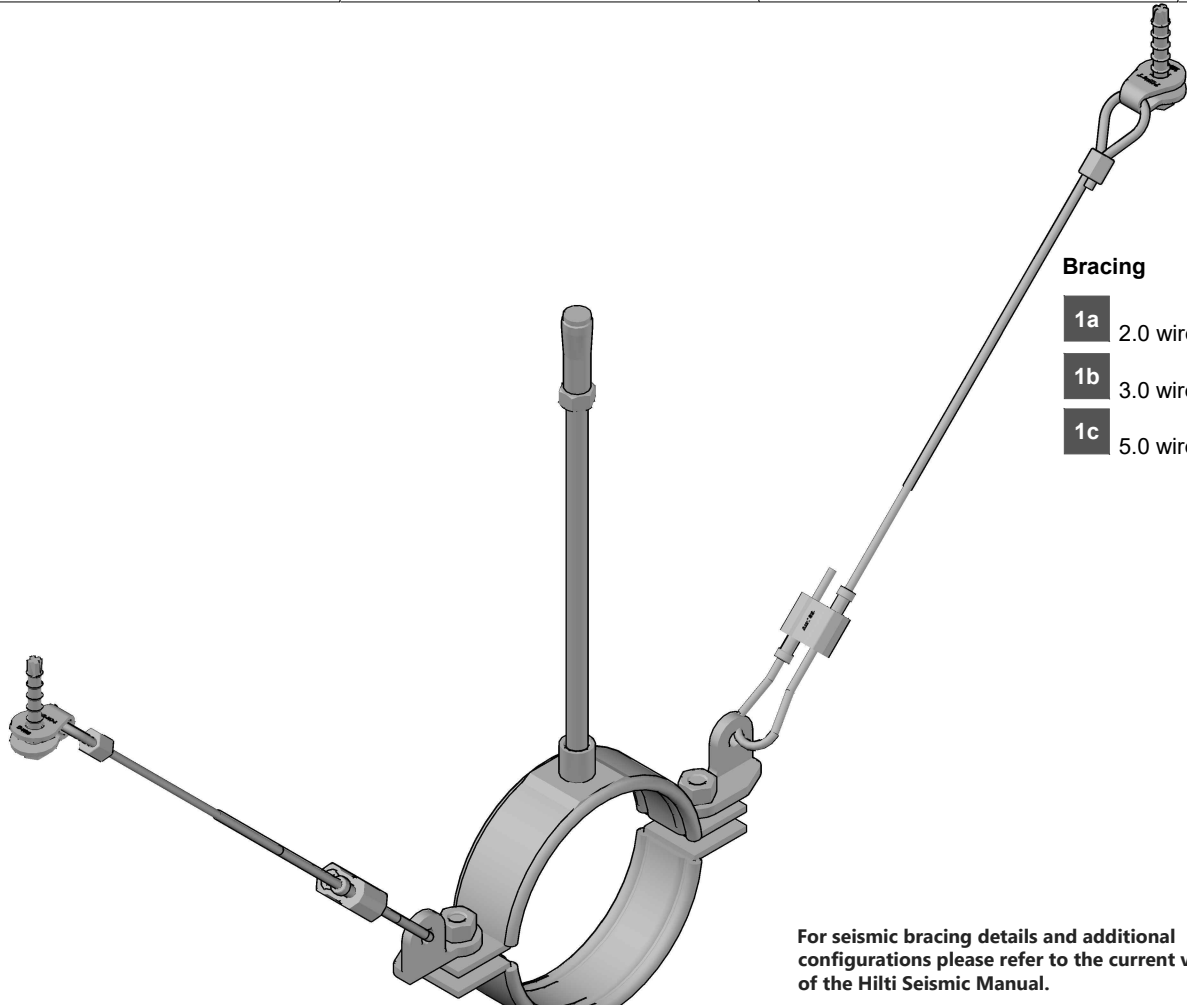
For seismic bracing details and additional configurations please refer to the current version of the Hilti Seismic Manual.

Application description	Application	Product lines	Base material
Wire system - Bracing Single Fastening Point On Concrete Slab		Wire system	Concrete
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts and the anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor.</li> <li>Only one wire may be suspended on each clip.</li> </ul>		MQS System	

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# Bracing - Single Fastening Point on Concrete Slab - Double Connection:

1a	Bracing 2.0 wire	1b	Bracing 3.0 wire	1c	Bracing 5.0 wire	1a-c
<b>Anchor</b>		<b>Anchor</b>		<b>Anchor</b>		
1x HUS3-H 8x75 25/15/5 anchor	2079796	1x HUS3-H 8x75 25/15/5 anchor	2079796	1x HUS3-H 8x75 25/15/5 anchor	2079796	
HST3 M10x90 30/10 anchor	2105712	HST3 M10x90 30/10 anchor	2105712	HST3 M10x90 30/10 anchor	2105712	
<b>Clip</b>		<b>Clip</b>		<b>Clip</b>		
1x MW-C clip	2287563	1x MW-C clip	2287563	1x MW-C clip	2287563	
<b>Loop combo</b>		<b>Loop combo</b>		<b>Loop combo</b>		
1x loop and lock		1x loop and lock		1x loop and lock		
Kit MW-LP L 2.0/1m	2280077	Kit MW-LP L 3.0/1m	2280082	Kit MW-LP L 5.0/1m	2287096	
Kit MW-LP L 2.0/2m	2280078	Kit MW-LP L 3.0/2m	2280083	Kit MW-LP L 5.0/2m	2287097	
Kit MW-LP L 2.0/3m	2280079	Kit MW-LP L 3.0/3m	2280084	Kit MW-LP L 5.0/3m	2287098	
Kit MW-LP L 2.0/5m	2280080	Kit MW-LP L 3.0/5m	2280085	Kit MW-LP L 5.0/5m	2287099	
Kit MW-LP L 2.0/10m	2280081	Kit MW-LP L 3.0/10m	2280086	Kit MW-LP L 5.0/10m	2287099	
<b>Seismic hinge</b>		<b>Seismic hinge</b>		<b>Seismic hinge</b>		
1x MQS-A 9.4	2083721	1x MQS-A 9.4	2083721	1x MQS-A 9.4	2083721	
MQS-A 11.5	2083722	MQS-A 11.5	2083722	MQS-A 11.5	2083722	
MQS-A 13.6	2083723	MQS-A 13.6	2083723	MQS-A 13.6	2083723	
MQS-A 16.3	2083724	MQS-A 16.3	2083724	MQS-A 16.3	2083724	



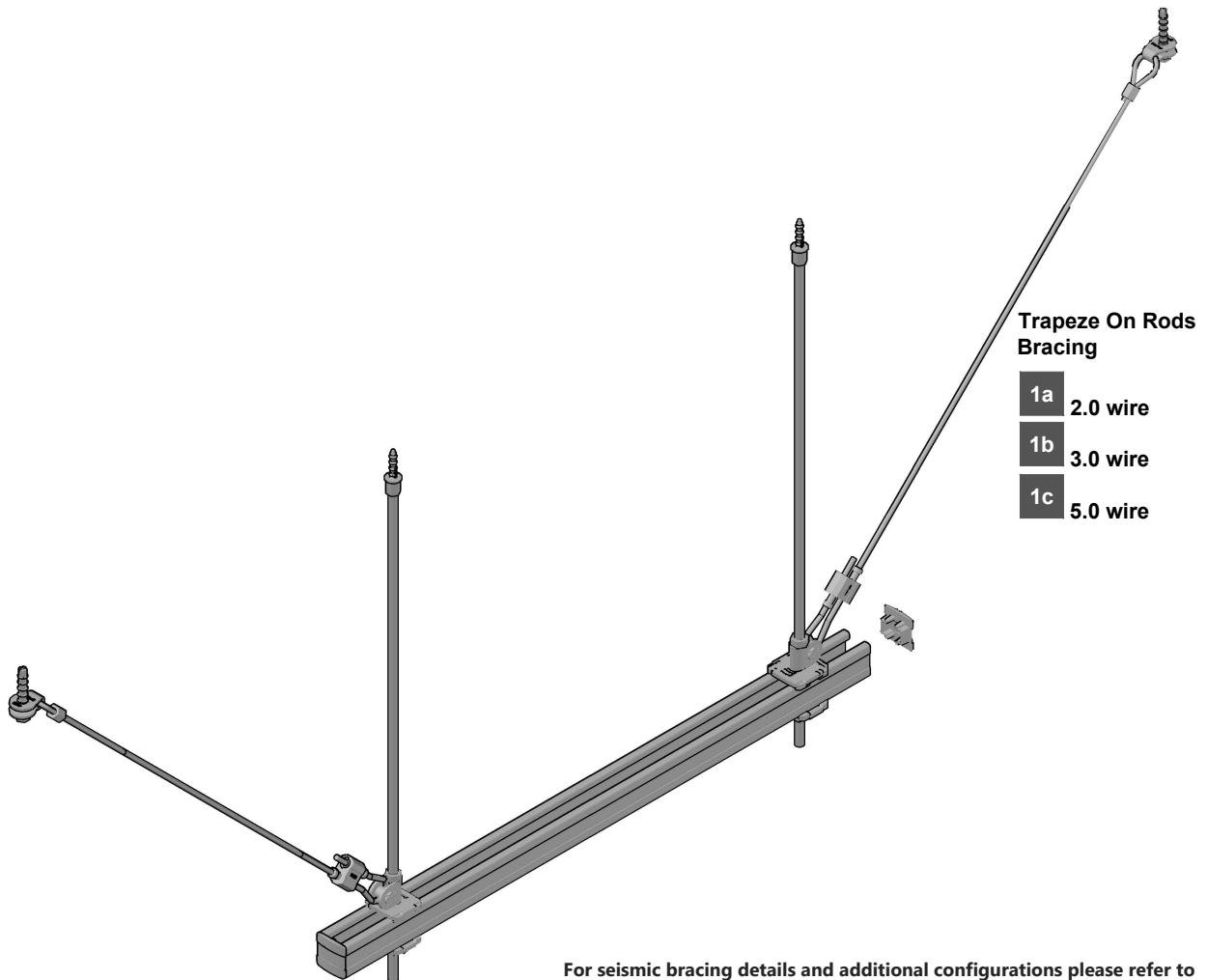
For seismic bracing details and additional configurations please refer to the current version of the Hilti Seismic Manual.

Application description	Application	Product lines	Base material
Wire system - Bracing Single Fastening Point On Concrete Slab - Double		Wire system	Concrete
<b>General comments</b> <ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts and the anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor.</li> <li>Only one wire may be suspended on each clip.</li> </ul>		MQS System	

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# Bracing - Trapeze On Rods Fixed On Concrete Slab:

1a	Bracing 2.0 wire	1b	Bracing 3.0 wire	1c	Bracing 5.0 wire	1a-c
<b>Anchor</b>		<b>Anchor</b>		<b>Anchor</b>		
1x HUS3-H 8x75 25/15/5 anchor 2079796		1x HUS3-H 8x75 25/15/5 anchor 2079796		1x HUS3-H 8x75 25/15/5 anchor 2079796		
HST3 M10x90 30/10 anchor 2105712		HST3 M10x90 30/10 anchor 2105712		HST3 M10x90 30/10 anchor 2105712		
<b>Clip</b>		<b>Clip</b>		<b>Clip</b>		
1x MW-C clip 2287563		1x MW-C clip 2287563		1x MW-C clip 2287563		
<b>Loop combo</b>		<b>Loop combo</b>		<b>Loop combo</b>		
1x Loop and lock		1x Loop and lock		1x Loop and lock		
Kit MW-LP L 2.0/1m 2280077		Kit MW-LP L 3.0/1m 2280082		Kit MW-LP L 5.0/1m 2287096		
Kit MW-LP L 2.0/2m 2280078		Kit MW-LP L 3.0/2m 2280083		Kit MW-LP L 5.0/2m 2287097		
Kit MW-LP L 2.0/3m 2280079		Kit MW-LP L 3.0/3m 2280084		Kit MW-LP L 5.0/3m 2287098		
Kit MW-LP L 2.0/5m 2280080		Kit MW-LP L 3.0/5m 2280085		Kit MW-LP L 5.0/5m 2287099		
Kit MW-LP L 2.0/10m 2280081		Kit MW-LP L 3.0/10m 2280086		Kit MW-LP L 5.0/10m 2287580		
<b>1x Seismic hinge</b>		<b>1x Seismic hinge</b>		<b>1x Seismic hinge</b>		
MQS-HR-8 2330877		MQS-HR-8 2330877		MQS-HR-8 2330877		
MQS-HR-10 2330878		MQS-HR-10 2330878		MQS-HR-10 2330878		



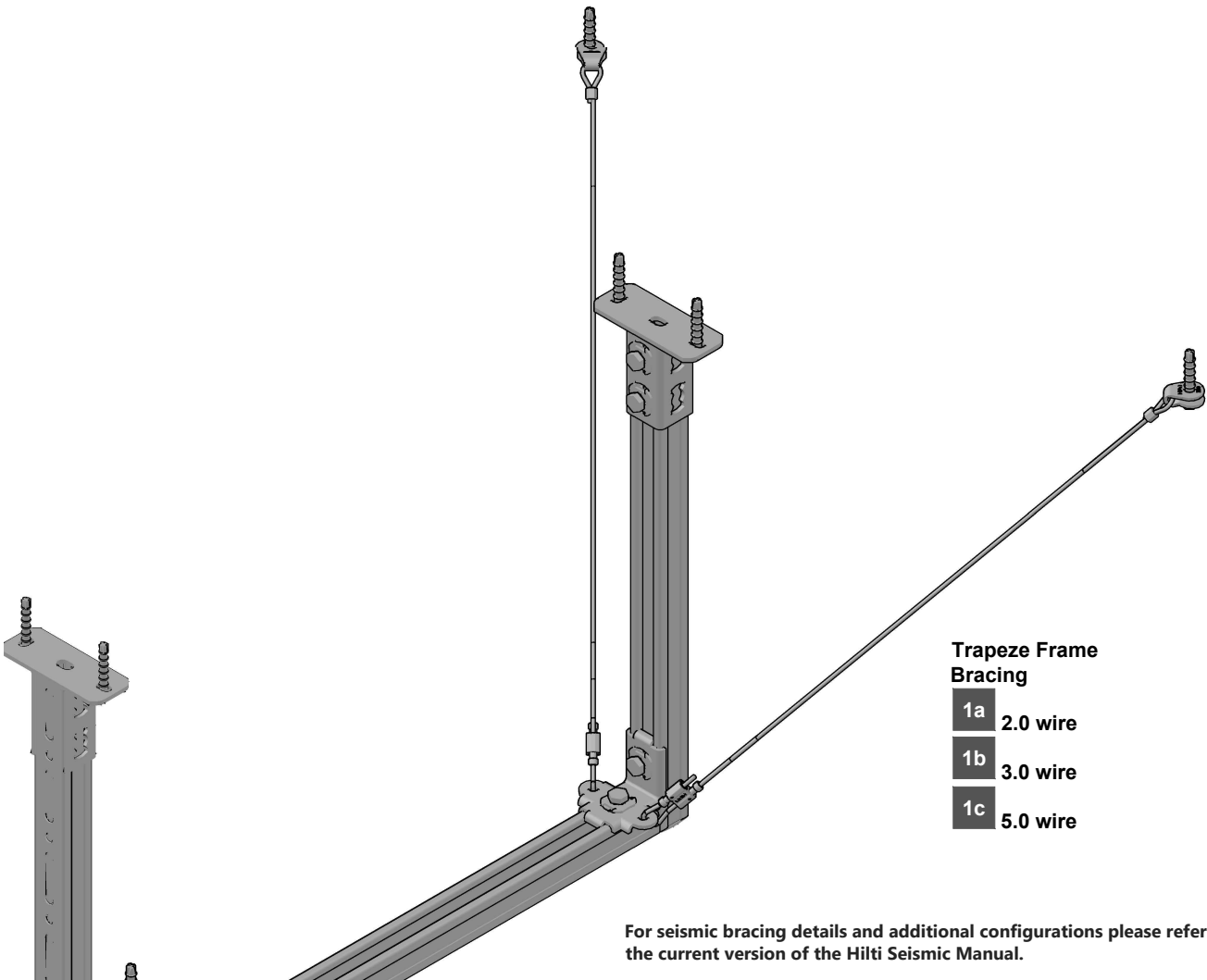
For seismic bracing details and additional configurations please refer to the current version of the Hilti Seismic Manual.

Application description	Application	Product lines	Base material
Wire system - Bracing - Trapeze On Rods On Concrete Slab		7	Wire system
<b>General comments</b>		MQ System	Concrete
<ul style="list-style-type: none"> <li>Loading must always be compared with the capacity of all connected parts and anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor.</li> <li>Only one wire may be suspended on each clip.</li> </ul>		MQS System	

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# Bracing - Trapeze Frame Fixed On Concrete Slab:

1a	Bracing 2.0 wire	1b	Bracing 3.0 wire	1c	Bracing 5.0 wire	1a-c
<b>Anchor</b>		<b>Anchor</b>		<b>Anchor</b>		
1x HUS3-H 8x75 25/15/5 anchor 2079796		1x HUS3-H 8x75 25/15/5 anchor 2079796		1x HUS3-H 8x75 25/15/5 anchor 2079796		
HST3 M10x90 30/10 anchor 2105712		HST3 M10x90 30/10 anchor 2105712		HST3 M10x90 30/10 anchor 2105712		
<b>Clip</b>		<b>Clip</b>		<b>Clip</b>		
1x MW-C clip 2287563		1x MW-C clip 2287563		1x MW-C clip 2287563		
<b>Loop combo</b>		<b>Loop combo</b>		<b>Loop combo</b>		
1x Loop and lock		1x Loop and lock		1x Loop and lock		
Kit MW-LP L 2.0/1m 2280077		Kit MW-LP L 3.0/1m 2280082		Kit MW-LP L 5.0/1m 2287096		
Kit MW-LP L 2.0/2m 2280078		Kit MW-LP L 3.0/2m 2280083		Kit MW-LP L 5.0/2m 2287097		
Kit MW-LP L 2.0/3m 2280079		Kit MW-LP L 3.0/3m 2280084		Kit MW-LP L 5.0/3m 2287098		
Kit MW-LP L 2.0/5m 2280080		Kit MW-LP L 3.0/5m 2280085		Kit MW-LP L 5.0/5m 2287099		
Kit MW-LP L 2.0/10m 2280081		Kit MW-LP L 3.0/10m 2280086		Kit MW-LP L 5.0/10m 2287580		
1x Seismic trapeze angle MQS-W set 2330879		1x Seismic trapeze angle MQS-W set 2330879		1x Seismic trapeze angle MQS-W set 2330879		



Application description	Application	Product lines	Base material
Wire system - Bracing - Trapeze Frame On Concrete Slab		Wire system	Concrete
<b>General comments</b>		MQ System	
<ul style="list-style-type: none"> <li>• Loading must always be compared with the capacity of all connected parts and of the anchor within the chosen base material. This capacity is affected by the angle of loading from the vertical and the prying factor.</li> <li>• Only one wire may be suspended on each clip.</li> </ul>		MQS System	

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Hilti Aktiengesellschaft  
9494 Schaan, Liechtenstein  
P +423-234 2965

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