

# Mounting instructions for Wibe Flex – support system in steel



# Installation recommendations for electrical cable tray/ladder systems in buildings



## Safe handling

It is advisable to wear safety gloves when installing Wibe Flex.



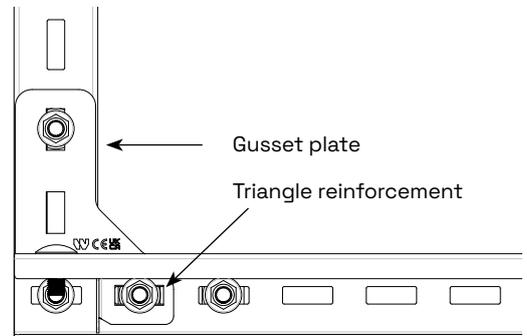
## Wibe Flex system – Tested configurations

### 1 Trapeze configuration

A horizontal rail supported by two vertical Profiles.

This configuration can be reinforced using Gusset plates at the corners and Triangles within the Profiles.

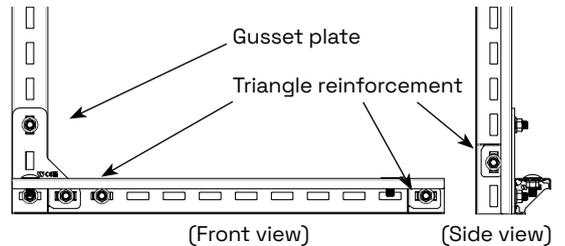
It is recommended to install Triangles at the ends of the horizontal Profiles and beneath the load points.



### 2 L configuration

A horizontal Profile supported by one vertical Profile at the side.

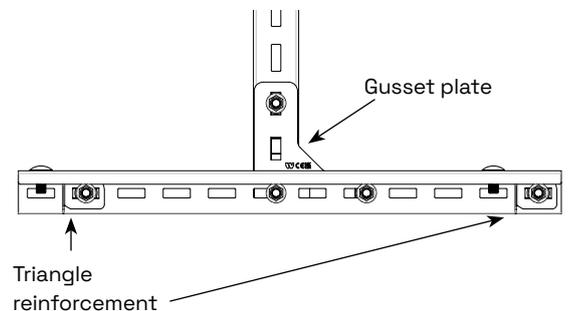
A Gusset plate is mandatory, along with Triangles at the ends of the Profiles.



### 3 T configuration

A horizontal Profile supported by one vertical Profile at the centre.

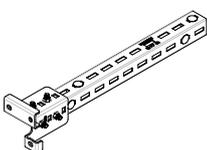
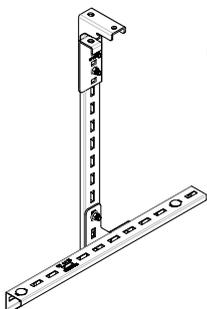
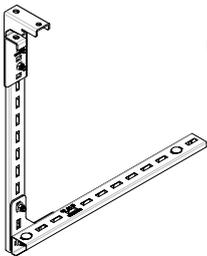
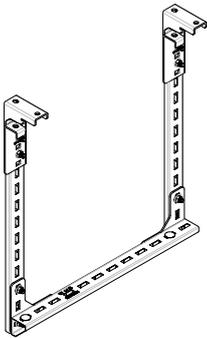
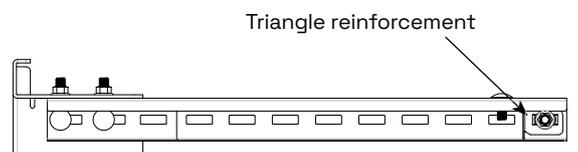
A Gusset plate is mandatory, along with Triangles at the ends of the horizontal Profiles.



### 4 Cantilever configuration

A horizontal Profile fixed directly to a Starter Bracket.

Triangle at the end of the Profile are mandatory.

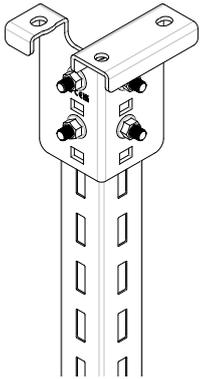




Recommended torque  
for Bolt kit M10: 25 Nm



## Fixation methods



### Bolted starter brackets

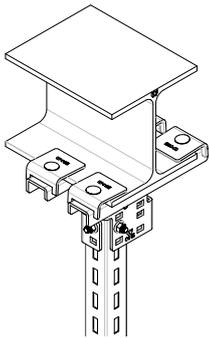
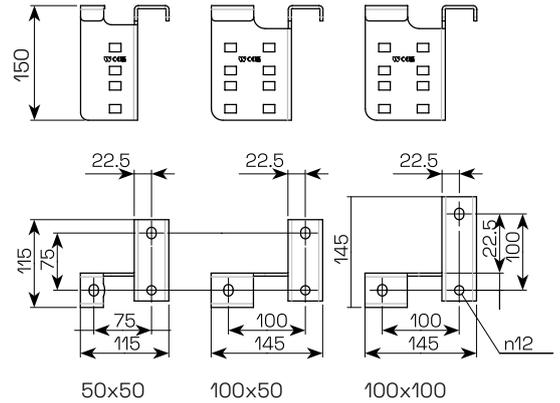
Fixation to the structure:

Bolted starter brackets require three M10 bolts.  
The spacing between the Bolt kits depends on the bracket size.  
Note that the 100x50 Bracket is asymmetric.

Fixation to the Profile:

To prevent sliding and twisting:

- Use at least 4 bolts for 50x50 Profiles
- 6 bolts for 100x50 Profiles
- 8 bolts for 100x100 Profiles



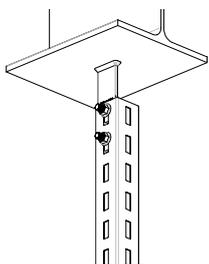
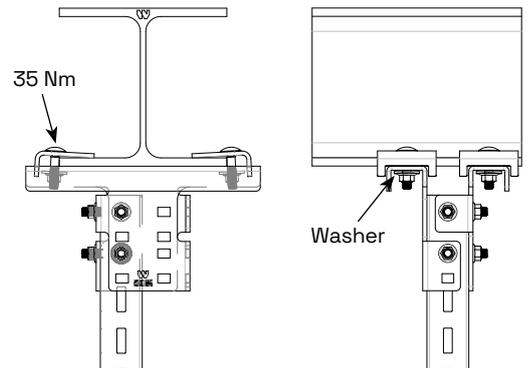
### Beam clamp starter brackets

Fixation to the structure:

Beam clamp starter brackets must be used in pairs.  
Use suitable Beam clamps and Beam clamp bolt kits depending on beam thickness, and select the appropriate bracket based on the beam's width.  
Torque the nuts at 35Nm.

Fixation to the profile:

Use a minimum of 4 Bolt kits to prevent sliding and twisting.



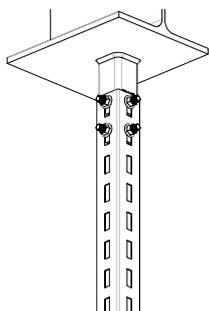
### Welded starter brackets

Fixation to the structure:

Starter brackets must be welded to the structure when the application does not generate torque on the bracket.

Fixation to the Profile:

Use at least 2 Bolt kits to prevent sliding.



### Welded angled starter brackets

Fixation to the structure:

If torque is generated during use, the Angeled starter brackets must be welded to the structure.

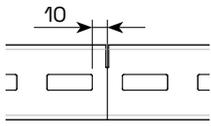
Fixation to the Profile:

To prevent sliding and twisting:

- Use at least 4 Bolt kits for 50x50 profiles
- 6 bolts for 100x50 profiles
- 8 bolts for 100x100 profiles

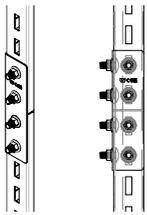


Recommended torque  
for Bolt kit M10: 25 Nm



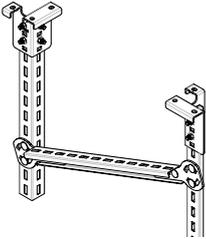
## Profile cutting

If a Profile needs to be cut, aim for the centre point between two rectangular slots. This minimises sharp edges caused by the slot pattern.



## Profile joining

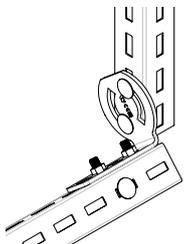
To connect two Profiles lengthwise, use the appropriate Splice connector. Ensure that all intersecting slots are secured with bolts.



## Bracing brackets

Bracing brackets allow connection of Profiles at angles other than 90°, ideal for lateral reinforcement or creating slopes.

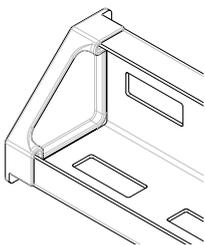
Size 50:  $\pm 50^\circ$   
Size 100:  $\pm 45^\circ$



## Flexi brackets

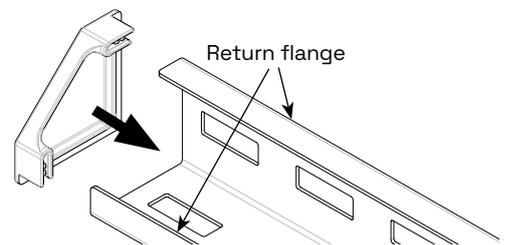
Flexi brackets offer angular adjustability for supporting cables running along sloped structures.

Size 50:  $\pm 50^\circ$   
Size 100:  $\pm 45^\circ$



## End plugs

Protective end caps cover the open ends of Profiles, preventing exposure to sharp edges. They are secured by locking into the return flange of the Profiles.

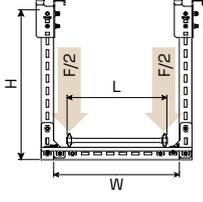
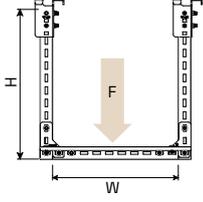
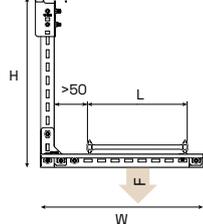


# Safe working load

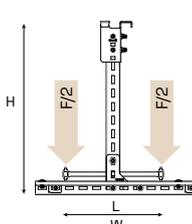
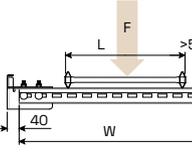
SWL for tested applications according to IEC 61537:2006.  
For other applications, please contact technical support.

C4 HDG / Z+

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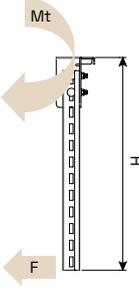
Support configuration	Vertical profile size	Horizontal profile size	Profile ref	Bracket ref	Reinforcement (Gusset plates at the corners + Triangles at the ends of the profiles)	Vertical profile length H (m)	Horizontal profile width W (m)	UDL length L (m)	SWL UDL (N)	SWL central point (N)			
<b>U-frame:</b> Starter bracket + Pendant + Profile  	50x50	50x50	EI1318001	EI1316015	5x EI1319001 + 2x EI1319004	1	1.1	0.9	14 000	2 000			
			EI2318004	EI2316018	5x EI2319007 + 2x EI2319010								
	100x50	100x50	EI1318002	EI1316016	5x EI1319002 + 2x EI1319005	1	1.1	0.9	21 000	6 250			
			EI2318005	EI2316019	5x EI2319008 + 2x EI2319011								
			EI1318003	EI1316017	5x EI1319003 + 2x EI1319006								
			EI2318006	EI2316020	5x EI2319009 + 2x EI2319012								
<b>L-frame:</b> Started bracket + Pendant + cantilever 	50x50	50x50	EI1318001	EI1316015	2x EI1319001 + 1x EI1319004	1	0.5	0.4	700				
			EI2318004	EI2316018	2x EI2319007 + 1x EI2319010								
			EI1318001	EI1316015	2x EI1319001 + 1x EI1319004					1	0.7	0.6	500
			EI2318004	EI2316018	2x EI2319007 + 1x EI2319010								
	100x50	100x50	EI1318002	EI1316016	2x EI1319002 + 1x EI1319005	1	0.5	0.4	3 500				
			EI2318005	EI2316019	2x EI2319008 + 1x EI2319011								
			EI1318002	EI1316016	2x EI1319002 + 1x EI1319005					1	1.0	0.9	1 300
			EI2318005	EI2316019	2x EI2319008 + 1x EI2319011								
	100x100	100x100	EI1318003	EI1316017	2x EI1319003 + 1x EI1319006	1	0.5	0.4	2 600				
			EI2318006	EI2316020	2x EI2319009 + 1x EI2319012								
			EI1318003	EI1316017	2x EI1319003 + 1x EI1319006					1	1.0	0.9	1 350
			EI2318006	EI2316020	2x EI2319009 + 1x EI2319012								

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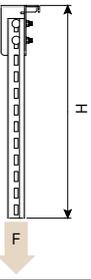
Support configuration	Vertical profile size	Horizontal profile size	Profile ref	Bracket ref	Reinforcement: Gusset at the corner + Triangles placed at the end of the horizontal channel	Vertical profile height H (m)	Horizontal profile width W (m)	UDL length L (m)	SWL (N)
<p>T-frame: Started bracket + Pendant + Channels</p> 	50x50	50x50	EI1318001	EI1316015	2x EI1319001 + 1x EI1319004	1	0.5	0.4	1900
			EI2318004	EI2316018	2x EI2319007 + 1x EI2319010				
			EI1318001	EI1316015	2x EI1319001 + 1x EI1319004				
			EI2318004	EI2316018	2x EI2319007 + 1x EI2319010				
	100x50	100x50	EI1318002	EI1316016	2x EI1319002 + 1x EI1319005	1	0.7	0.6	10 000
			EI2318005	EI2316019	2x EI2319008 + 1x EI2319011				
			EI1318002	EI1316016	2x EI1319002 + 1x EI1319005				
			EI2318005	EI2316019	2x EI2319008 + 1x EI2319011				
	100x100	100x100	EI1318003	EI1316017	2x EI1319003 + 1x EI1319006	1	0.7	0.6	8 500
			EI2318006	EI2316020	2x EI2319009 + 1x EI2319012				
			EI1318003	EI1316017	2x EI1319003 + 1x EI1319006				
			EI2318006	EI2316020	2x EI2319009 + 1x EI2319012				
Support configuration	Profile size	Profile ref	Bracket ref	Reinforcement (at the end of the profile)	Profile length W (mm)	UDL length L (mm)	SWL (N)		
<p>Cantilever arm</p> 	50x50	EI1318001	EI1316015	EI1319001	600	400	900		
		EI2318004	EI2316018	EI2319007					
		EI1318001	EI1316015	EI1319001					
		EI2318004	EI2316018	EI2319007					
	100x50	100x50	EI1318002	EI1316016	EI1319002	800	600	1650	
			EI2318005	EI2316019	EI2319008				
			EI1318002	EI1316016	EI1319002				
			EI2318005	EI2316019	EI2319008				
	100x100	100x100	EI1318003	EI1316017	EI1319003	800	600	2 100	
			EI2318006	EI2316020	EI2319009				
			EI1318003	EI1316017	EI1319003				
			EI2318006	EI2316020	EI2319009				
100x100	100x100	EI1318003	EI1316017	EI1319003	1 100	900	1 300		
		EI2318006	EI2316020	EI2319009					
		EI1318003	EI1316017	EI1319003					
		EI2318006	EI2316020	EI2319009					

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Support configuration	Profile size	Profile ref	Bracket ref	Reinforcement (at the end of the profile)	Profile height W (mm)	SWL (Nm)
Moment on pendant 	50x50	EI1318001	EI1316015	EI1319001	1000	250
		EI2318004	EI2316018	EI2319007		
	100x50*	EI1318002	EI1316016	EI1319002	1000	700
		EI2318005	EI2316019	EI2319008		
	100x100	EI1318003	EI1316017	EI1319003	1000	1000
		EI2318006	EI2316020	EI2319009		

\* for 100x50: loading on the strongest way. For torque value with I-beam starter bracket, contact Technical support

Support configuration	Profile size	Profile ref	Bracket ref	Profile height W (mm)	SWL (N)
Bolted starter bracket + Pendant 	50x50	EI1318001	EI1316015	1000	25000
		EI2318004	EI2316018		
	100x50	EI1318002	EI1316016	1000	25000
		EI2318005	EI2316019		
	100x100	EI1318003	EI1316017	1000	25000
		EI2318006	EI2316020		



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