

# 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.



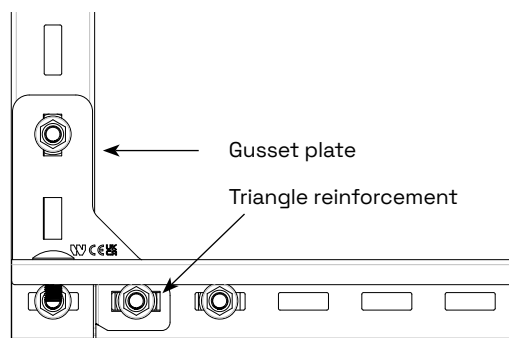
## Wibe Flex system – Tested configurations

### 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.

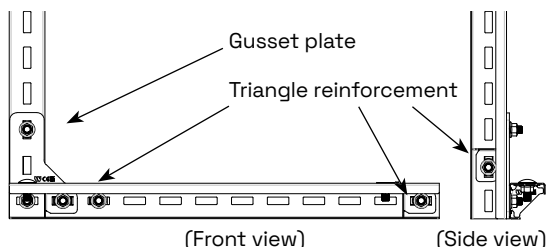
It is recommended to install Triangles at the ends of the horizontal Profiles and beneath the load points.



### 2 L configuration

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

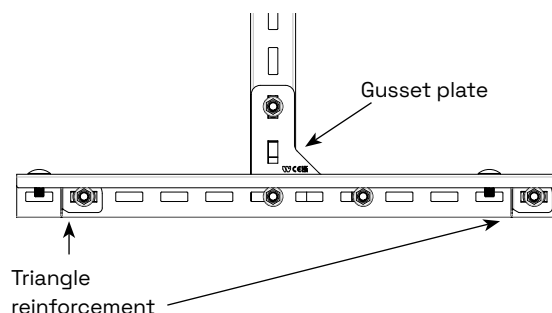
A Gusset plate is mandatory, along with Triangles at the ends of the Profiles.



### 3 T configuration

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

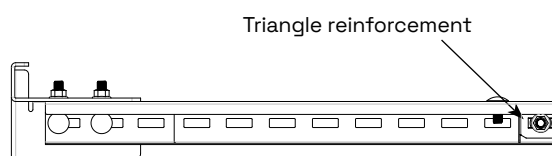
A Gusset plate is mandatory, along with Triangles at the ends of the horizontal Profiles.



### 4 Cantilever configuration

A horizontal Profile fixed directly to a Starter Bracket.

Triangle at the end of the Profile are mandatory.

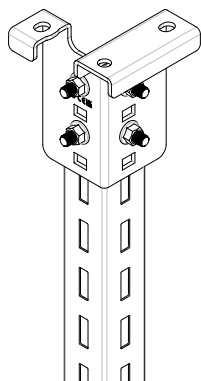




Recommended torque  
for Bolt kit M10: 25 Nm



## Fixation methods



### Bolted starter brackets

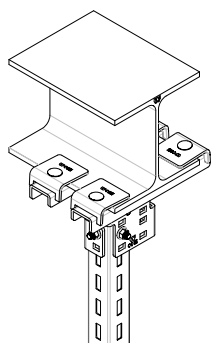
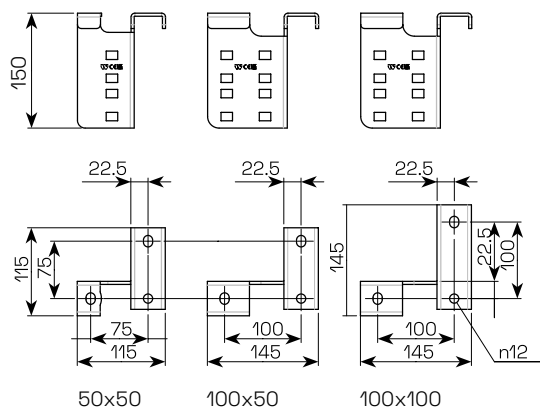
Fixation to the structure:

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



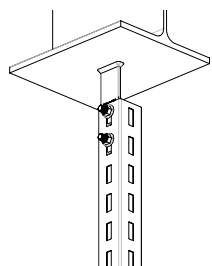
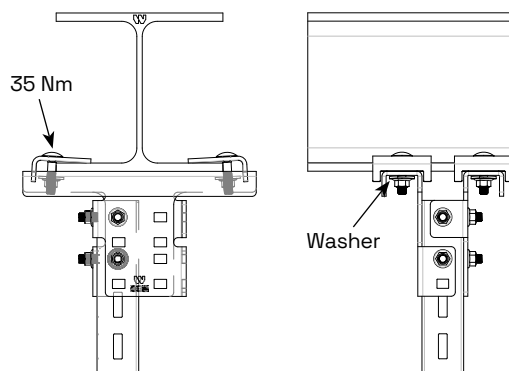
### Beam clamp starter brackets

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.



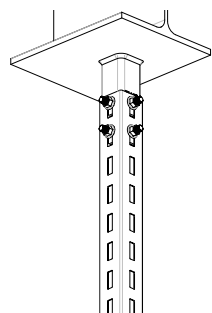
### Welded starter brackets

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.

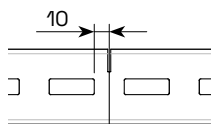
Fixation to the Profile:

To prevent sliding and twisting:

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

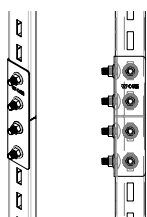


Recommended torque  
for Bolt kit M10: 25 Nm



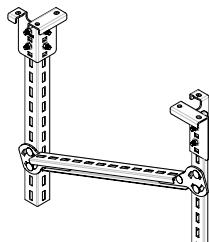
## Profile cutting

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

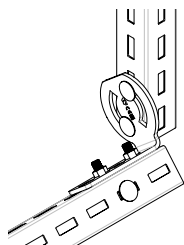
To connect two Profiles lengthwise, use the appropriate Splice connector. Ensure that all intersecting slots are secured with bolts.



## Bracing brackets

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

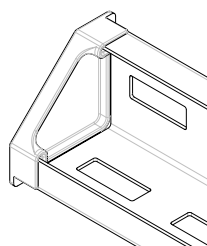
Size 50:  $\pm 50^\circ$   
Size 100:  $\pm 45^\circ$



## Flexi brackets

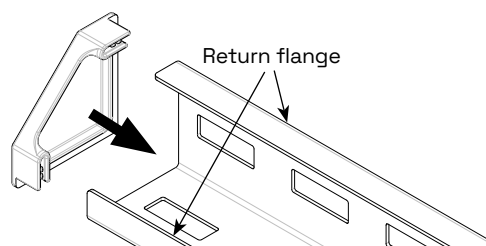
Flexi brackets offer angular adjustability for supporting cables running along sloped structures.

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



## End plugs

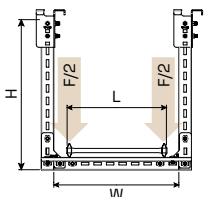
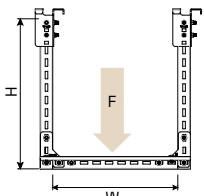
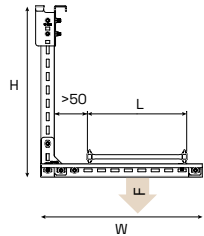
Protective end caps cover the open ends of Profiles, preventing exposure to sharp edges. They are secured by locking into the return flange of the Profiles.

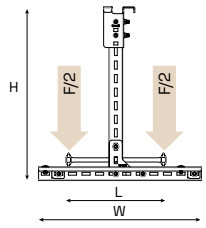
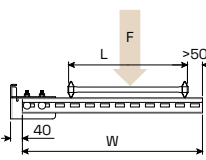


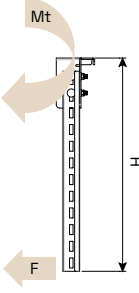
# Safe working load

SWL for tested applications. For other applications, please contact technical support.

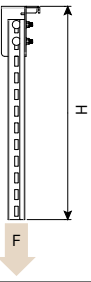
C4 HDG / Z+ CX SS AISI316L

| 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) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|-------------|-------------|--------------------------------------------------------------------------------------|-------------------------------|--------------------------------|------------------|-------------|-----------------------|
| U-frame:<br>Starter bracket<br>+ Pendant + Profile<br>  | 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                                                          |                               |                                |                  |             |                       |
|                                                                                                                                                                                                                            | 100x100               | 100x100                 | EI1318003   | EI1316017   | 5x EI1319003 + 2x EI1319006                                                          | 1                             | 1.1                            | 0.9              | 28 500      | 8 000                 |
|                                                                                                                                                                                                                            |                       |                         | EI2318006   | EI2316020   | 5x EI2319009 + 2x EI2319012                                                          |                               |                                |                  |             |                       |
| Support configuration                                                                                                                                                                                                      | Vertical profile size | Horizontal profile size | Profile ref | Bracket ref | Reinforcement (at the end of the profile)                                            | Vertical profile height H (m) | Horizontal profile width W (m) | UDL length L (m) | SWL (N)     |                       |
| L-frame:<br>Started bracket +<br>Pendant + cantilever<br>                                                                               | 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              | 3500        |                       |
|                                                                                                                                                                                                                            |                       |                         | EI2318005   | EI2316019   | 2x EI2319008 + 1x EI2319011                                                          |                               |                                |                  |             |                       |
|                                                                                                                                                                                                                            |                       |                         | EI1318002   | EI1316016   | 2x EI1319002 + 1x EI1319005                                                          | 1                             | 1.0                            | 0.9              | 1300        |                       |
|                                                                                                                                                                                                                            |                       |                         | EI2318005   | EI2316019   | 2x EI2319008 + 1x EI2319011                                                          |                               |                                |                  |             |                       |
|                                                                                                                                                                                                                            | 100x100               | 100x100                 | EI1318003   | EI1316017   | 2x EI1319003 + 1x EI1319006                                                          | 1                             | 0.5                            | 0.4              | 2600        |                       |
|                                                                                                                                                                                                                            |                       |                         | EI2318006   | EI2316020   | 2x EI2319009 + 1x EI2319012                                                          |                               |                                |                  |             |                       |
|                                                                                                                                                                                                                            |                       |                         | EI1318003   | EI1316017   | 2x EI1319003 + 1x EI1319006                                                          | 1                             | 1.0                            | 0.9              | 1350        |                       |
|                                                                                                                                                                                                                            |                       |                         | EI2318006   | EI2316020   | 2x EI2319009 + 1x EI2319012                                                          |                               |                                |                  |             |                       |

| 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) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------|-------------|---------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------|-------------------|---------|
| <div>T-frame:<br/>Started bracket +<br/>Pendant + Channels</div> <div></div> | 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                                                                 | 1                                         | 0,7                            | 0,6               | 1450    |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318004   | EI2316018   | 2x EI2319007+ 1x EI2319010                                                                  |                                           |                                |                   |         |
|                                                                                                                                                                | 100x50                                                                                                                   | 100x50                  | EI1318002   | EI1316016   | 2x EI1319002 + 1x EI1319005                                                                 | 1                                         | 0,7                            | 0,6               | 10000   |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318005   | EI2316019   | 2x EI2319008+ 1x EI2319011                                                                  |                                           |                                |                   |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI1318002   | EI1316016   | 2x EI1319002 + 1x EI1319005                                                                 | 1                                         | 1                              | 0,9               | 5250    |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318005   | EI2316019   | 2x EI2319008+ 1x EI2319011                                                                  |                                           |                                |                   |         |
|                                                                                                                                                                | 100x100                                                                                                                  | 100x100                 | EI1318003   | EI1316017   | 2x EI1319003 + 1x EI1319006                                                                 | 1                                         | 0,7                            | 0,6               | 8500    |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318006   | EI2316020   | 2x EI2319009+ 1x EI2319012                                                                  |                                           |                                |                   |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI1318003   | EI1316017   | 2x EI1319003 + 1x EI1319006                                                                 | 1                                         | 1                              | 0,9               | 4500    |
|                                                                                                                                                                |                                                                                                                          |                         | 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) |
|                                                                                                                                                                | <div>Cantilever arm</div> <div></div> | 50x50                   |             | EI1318001   | EI1316015                                                                                   | EI1319001                                 | 600                            | 400               | 900     |
|                                                                                                                                                                |                                                                                                                          |                         |             | EI2318004   | EI2316018                                                                                   | EI2319007                                 |                                |                   |         |
|                                                                                                                                                                |                                                                                                                          |                         |             | EI1318001   | EI1316015                                                                                   | EI1319001                                 | 800                            | 600               | 600     |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318004   | EI2316018   | EI2319007                                                                                   |                                           |                                |                   |         |
| 100x50                                                                                                                                                         |                                                                                                                          |                         | EI1318002   | EI1316016   | EI1319002                                                                                   | 800                                       | 600                            | 1650              |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318005   | EI2316019   | EI2319008                                                                                   |                                           |                                |                   |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI1318002   | EI1316016   | EI1319002                                                                                   | 1100                                      | 900                            | 1200              |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318005   | EI2316019   | EI2319008                                                                                   |                                           |                                |                   |         |
| 100x100                                                                                                                                                        |                                                                                                                          |                         | EI1318003   | EI1316017   | EI1319003                                                                                   | 800                                       | 600                            | 2 100             |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318006   | EI2316020   | EI2319009                                                                                   |                                           |                                |                   |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI1318003   | EI1316017   | EI1319003                                                                                   | 1100                                      | 900                            | 1300              |         |
|                                                                                                                                                                |                                                                                                                          |                         | EI2318006   | EI2316020   | EI2319009                                                                                   |                                           |                                |                   |         |

| Support configuration                                                                                  | Profile size | Profile ref | Bracket ref | Reinforcement (at the end of the profile) | Profile height W (mm) | SWL (Nm) |
|--------------------------------------------------------------------------------------------------------|--------------|-------------|-------------|-------------------------------------------|-----------------------|----------|
| Moment on pendant<br> | 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<br> | 50x50        | EI1318001   | EI1316015   | 1000                  | 25000   |
|                                                                                                                         |              | EI2318004   | EI2316018   |                       |         |
|                                                                                                                         | 100x50       | EI1318002   | EI1316016   | 1000                  | 25000   |
|                                                                                                                         |              | EI2318005   | EI2316019   |                       |         |
|                                                                                                                         | 100x100      | EI1318003   | EI1316017   | 1000                  | 25000   |
|                                                                                                                         |              | EI2318006   | EI2316020   |                       |         |



[wibe-group.com](http://wibe-group.com)