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European Technical Assessment

ETA-21/1046 of 30/12/2021

General Part

Technical Assessment Body issuing the European Technical Assessment	Instytut Techniki Budowlanej
Trade name of the construction product	HILTI angle connectors of MT System
Product family to which the construction product belongs	Products for installation systems for supporting technical building equipment
Manufacturer	HILTI AG Feldkircherstraβe 100 9494 Schaan FÜRSTENTUM LIECHTENSTEIN
Manufacturing plants	L 1124303, L 1027881
This European Technical Assessment contains	42 pages including 3 Annexes which form an integral part of this Assessment
This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of	European Assessment Document EAD 280016-00-0602 "Products for installation systems for supporting technical building equipment"

Specific Part

1 Technical description of the product

This European Technical Assessment covers HILTI angle connectors of MT System: MT-C-L1, MT-C-L1 OC, MT-C-L2, MT-C-L2 OC, MT-C-T/1, MT-C-T/1 OC, MT-C-LL1, MT-C-LL1 OC, MT-C-LL2, MT-C-LL2 OC, MT-C-T/2, MT-C-T/2 OC, MT-C-T A, MT-C-T A OC, MT-C-T 3D/2, MT-C-T 3D/2 OC, MT-C-T 3D/3, MT-C-T 3D/3 OC, MT-ES-40, MT-ES-40 OC, MT-C-GS OC, MT-C-GL OC, MT-C-GS A OC, MT-C-GL A OC, MT-U-GL1 OC, MT-C-GSP L OC, MT-C-GSP T OC, MT-C-GLP T OC, MT-ES-90 OC, MT-ES-70 OC, MT-AB A, MT-AB A OC, MT-AB-LL2 45, MT-AB-LL2 45 OC and MT-AB-G T OC.

MT-C-L1 and MT-C-L1 OC angle connectors are made of zinc coated steel. The angle connectors have two leg angles of equal length, arranged at an angle of 90° between each other. One round opening is located centrally on each leg angle.

MT-C-L2 and MT-C-L2 OC angle connectors are made of zinc coated steel. Two leg angles of different lengths are arranged at an angle of 90° between each other. One round opening is located centrally on shorter leg angle. Two round openings are located on the longer leg angle.

MT-C-T/1 and MT-C-T/1 OC angle connectors are made of zinc coated steel. Each connector arranges four parts to a combined U-shaped / L-shaped with one opening on each part.

MT-C-LL1 and MT-C-LL1 OC angle connectors are made of zinc coated steel. Each connector is combining two L-shaped 90° angles with one opening on each leg angle. A triangular component is connecting two leg angles at 90°.

MT-C-LL2 and MT-C-LL2 OC angle connectors are made of zinc coated steel. Each connector is combining two L-shaped 90° angles with two openings on each leg angle. A triangular component is connecting two leg angles at 90°.

MT-C-T/2 and MT-C-T/2 OC angle connectors are made of zinc coated steel. Each connector is combining two L-shaped 90° angles with two openings on each leg angle. The two L-shaped angles are arranged together in a T-shape.

MT-C-T-A and MT-C-T-A OC angle connectors are made of zinc coated steel. Two leg angles of different lengths are arranged at an angle of 90° between each other and stiffening ribs. One round opening is located on the shorter leg and two round openings are located on the longer leg angle.

MT-C-T 3D/2 and MT-C-T 3D/2 OC angle connectors are made of zinc coated steel. Each connector is combining two L-shaped 90° angles with one opening on each leg angle. The two L-shaped angles are arranged together at 90° in L-shape.

MT-C-T 3D/3 and MT-C-T 3D/3 OC angle connectors are made of zinc coated steel. Each connector is combining three L-shaped 90° angles with one opening on each leg angle. The three L-shaped angles are arranged together at 90° in U-shape.

MT-ES-40 and MT-ES-40 OS connectors are made of zinc coated steel. The connectors are in U-shape with six openings on the base side.

MT-C-GS OC, MT-C-GL OC, MT-C-GS A OC, and MT-C-GL A OC angle connectors are made of zinc coated steel. Two leg angles are arranged at an angle of 90° between each other and with stiffening ribs. Various openings in different size and shape are located on the leg angle.

MT-U-GL1 OC angle connector is made of zinc coated steel. The connector is in U-shape with the two parallel flanges in changing height. Various openings in different size and shape are located on each flange side and on the top.

MT-C-GSP L OC angle connector is made of flat zinc coated steel in L-shape with four openings in total.

MT-C-GSP T OC angle connector is made of flat zinc coated steel in T-shape with four openings in total.

MT-C-GLP T OC angle connector is made of flat zinc coated steel in T-shape with eight openings in total.

MT-ES-70 OC and MT-ES-90 OC angle connectors are made of zinc coated steel. The connectors are in U-shape with various round openings in different size on each flange and on the top.

MT-AB A and MT-AB A OC angle connectors are made of zinc coated steel. The connectors are in U-shape with two parallel flanges in trapezoid shape and in total with five openings.

MT-AB-LL2 45 and MT-AB-LL2 45 OC angle connectors are made of zinc coated steel. Each connector is combining two L-shaped 90° angles with two openings on each leg angle. The two L-shaped angles are arranged at 135°.

MT-AB-G T OC angle connector is made of flat zinc coated steel in T-shape with eleven openings in total.

The drawings, dimensions and materials of the HILTI angle connectors of MT System are given in Annex A.

2 Specification of the intended use in accordance with the applicable European Assessment Document (EAD)

The performances given in clause 3 are only valid if HILTI angle connectors of MT Sytem are in compliance with the specifications and conditions given in Annex B.

The provisions made in this European Technical Assessment are based on an assumed working life of the HILTI angle connectors of MT Sytem of 50 years when installed in the works. The indications given on the working life cannot be interpreted as a guarantee given by the producer or Technical Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

In accordance with the European Assessment Document EAD 280016-00-0602, the products are intended to be used under dry indoor conditions for supporting:

- pipes for the transport of water not intended for human consumption,
- pipes for the transport of gas/fuel intended for the supply of building heating/cooling systems,
- technical building equipment in general.

3 Performance of the product and references to the methods used for its assessment

3.1 Performance of the product

3.1.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class A1
Resistance under fire exposure	No performance assessed

3.1.2 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Shape	Annex A
Dimension	Annex A
Material	Annex A
Characteristic resistance	Annex C

3.2 Methods used for the assessment

The assessment has been made in accordance with EAD 280016-00-0602.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

For products for installation systems to be used for supporting pipes for the transport of water not intended for human consumption, according to the Decision 1999/472/EC of the European Commission, amended by the Decision 2001/596/EC, the system 4 of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011) applies.

For products for installation systems intended to be used for supporting pipes for the transport of gas/fuel intended for the supply of building heating/cooling systems, according to the Decision 1999/472/EC of the European Commission, amended by the Decision 2001/596/EC, the system 3 of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011) applies.

For products for installation systems intended to be used for supporting technical building equipment in general according to the Decision 97/161/EC of the European Commission, the system 2+ of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011) applies.

5 Technical details necessary for the implementation of the AVCP system, as provided in the applicable European Assessment Document (EAD)

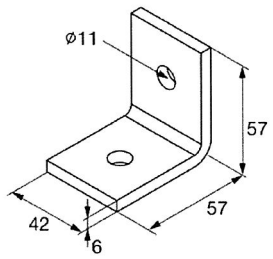
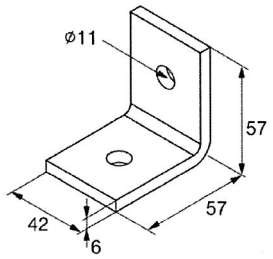
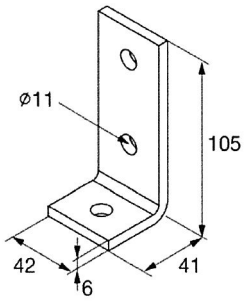
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited in Instytut Techniki Budowlanej.

For the type testing the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line or plant. In such cases the necessary type testing has to be agreed between Instytut Techniki Budowlanej and the notified body.

Issued in Warsaw on 30/12/2021 by Instytut Techniki Budowlanej

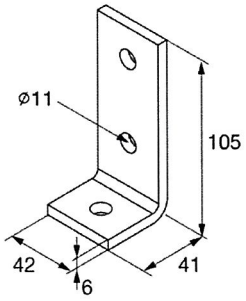
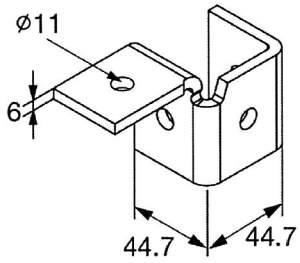
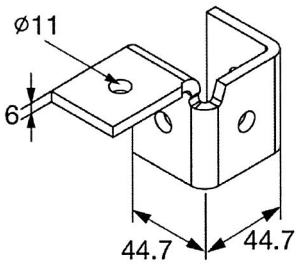
Anna Panek, MSc
Deputy Director of ITB

Table A1: Shape, dimensions and materials of MT-C-L1, MT-C-L1 OC and MT-C-L2

Shape and dimensions [mm]	Item number	Designation	Material
	2271514	MT-C-L1	Steel Q355B acc. to GB/T 1591 galvanized
	2271516	MT-C-L1 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2271518	MT-C-L2	Steel Q355B acc. to GB/T 1591 galvanized

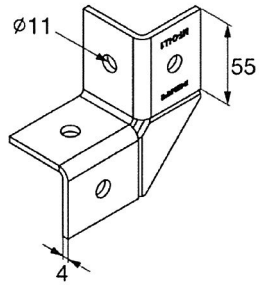
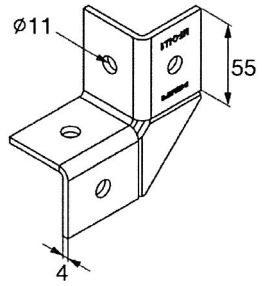
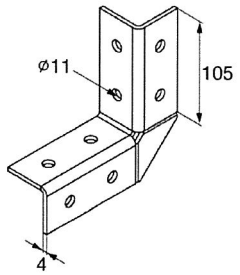
HILTI angle connectors of MT System	**Annex A1**
Product description Shape, dimensions and materials of angle connectors MT-C-L1, MT-C-L1 OC and MT-C-L2	of European Technical Assessment ETA-21/1046

Table A2: Shape, dimensions and materials of MT-C-L2 OC, MT-C-T/1 and MT-C-T/1 OC

Shape and dimensions [mm]	Item number	Designation	Material
	2271519	MT-C-L2 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272040	MT-C-T/1	Steel Q355B acc.to GB/T 1591 galvanized
	2272042	MT-C-T/1 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized

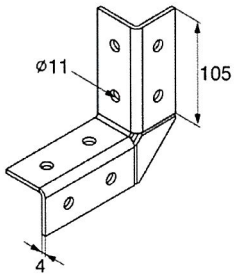
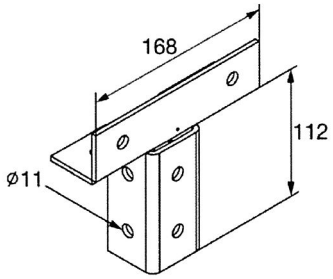
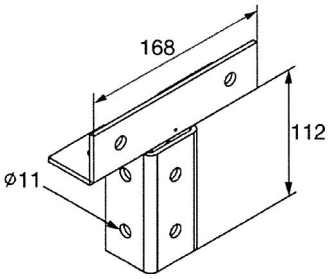
HILTI angle connectors of MT System	**Annex A2** of European Technical Assessment ETA-21/1046
Product description Shape, dimensions and materials of angle connectors MT-C-L2 OC, MT-C-T/1 and MT-C-T/1 OC	

Table A3: Shape, dimensions and materials of MT-C-LL1, MT-C-LL1 OC and MT-C-LL2

Shape and dimensions [mm]	Item number	Designation	Material
	2272047	MT-C-LL1	Steel Q235B acc. to GB/T700 galvanized
	2272049	MT-C-LL1 OC	Steel Q235B acc. to GB/T700 hot dip galvanized
	2272051	MT-C-LL2	Steel Q235B acc. to GB/T700 galvanized

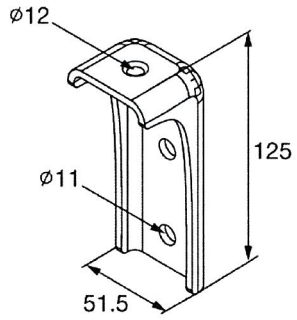
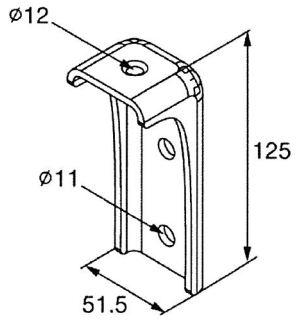
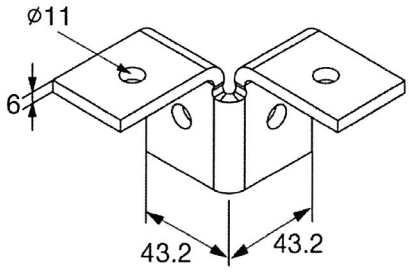
HILTI angle connectors of MT System	**Annex A3**
Product description Shape, dimensions and materials of angle connectors MT-C-LL1, MT-C-LL1 OC and MT-C-LL2	of European Technical Assessment ETA-21/1046

Table A4: Shape, dimensions and materials of MT-C-LL2 OC, MT-C-T/2 and MT-C-T/2 OC

Shape and dimensions [mm]	Item number	Designation	Material
	2272053	MT-C-LL2 OC	Steel Q235B acc. to GB/T700 hot dip galvanized
	2272054	MT-C-T/2	Steel Q235B acc. to GB/T700 galvanized
	2272055	MT-C-T/2 OC	Steel Q235B acc. to GB/T700 hot dip galvanized

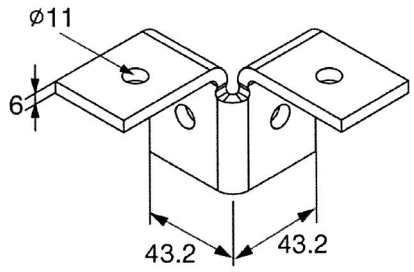
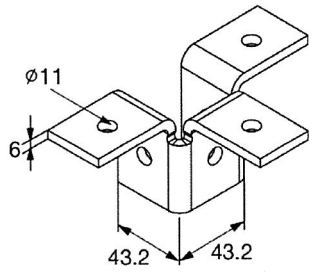
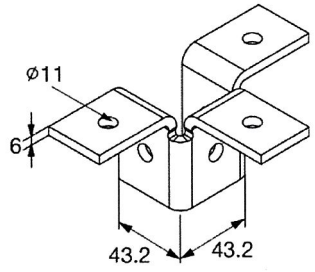
HILTI angle connectors of MT System	**Annex A4**
Product description Shape, dimensions and materials of angle connectors MT-C-LL2 OC, MT-C-T/2 and MT-C-T/2 OC	of European Technical Assessment ETA-21/1046

Table A5: Shape, dimensions and materials of MT-C-T A, MT-C-T A OC and MT-C-T 3D/2

Shape and dimensions [mm]	Item number	Designation	Material
	2272056	MT-C-T A	Steel Q355B acc. to GB/T 1591 galvanized
	2272057	MT-C-T A OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272058	MT-C-T 3D/2	Steel Q355B acc. to GB/T 1591 galvanized

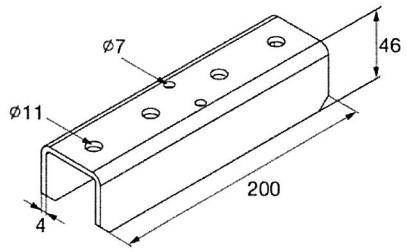
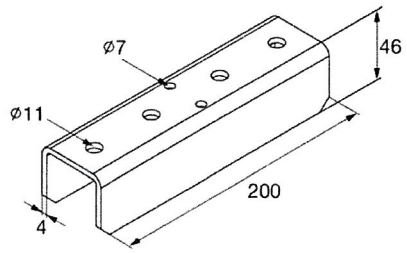
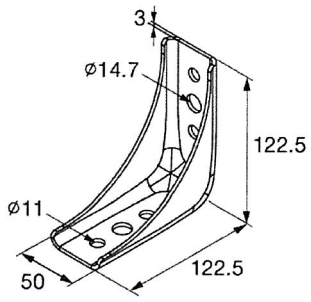
HILTI angle connectors of MT System	**Annex A5**
Product description Shape, dimensions and materials of angle connectors MT-C-T A, MT-C-T A OC and MT-C-T 3D/2	of European Technical Assessment ETA-21/1046

Table A6: Shape, dimensions and materials of MT-C-T-3D/2 OC, MT-C-T 3D/3 and MT-C-T 3D/3 OC

Shape and dimensions [mm]	Item number	Designation	Material
	2272059	MT-C-T-3D/2 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272060	MT-C-T 3D/3	Steel Q355B acc. to GB/T 1591 galvanized
	2272061	MT-C-T 3D/3 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized

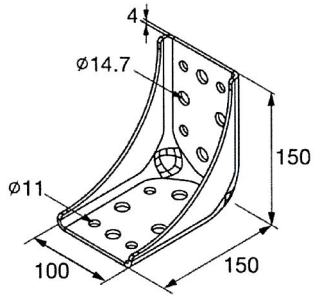
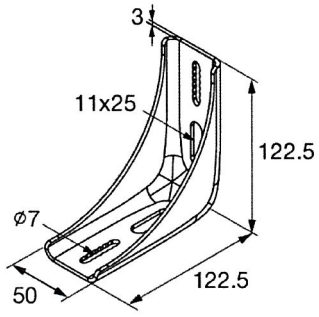
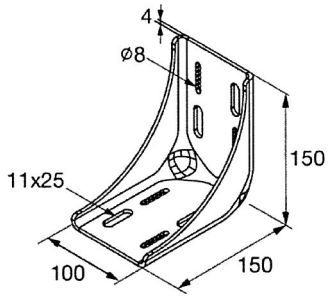
HILTI angle connectors of MT System	**Annex A6**
Product description Shape, dimensions and materials of angle connectors MT-C-T-3D/2 OC, MT-C-T 3D/3 and MT-C-T 3D/3 OC	of European Technical Assessment ETA-21/1046

Table A7: Shape, dimensions and materials of MT-ES-40, MT-ES-40 OC and MT-C-GS OC

Shape and dimensions [mm]	Item number	Designation	Material
	2272062	MT-ES-40	Steel Q235B acc. to GB/T700 galvanized
	2272063	MT-ES-40 OC	Steel Q235B acc. to GB/T700 hot dip galvanized
	2272064	MT-C-GS OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized

HILTI angle connectors of MT System	**Annex A7** of European Technical Assessment ETA-21/1046
Product description Shape, dimensions and materials of angle connectors MT-ES-40, MT-ES-40 OC and MT-C-GS OC	

Table A8: Shape, dimensions and materials of MT-C-GL OC, MT-C-GS A OC and MT-C-GL A OC

Shape and dimensions [mm]	Item number	Designation	Material
	2272066	MT-C-GL OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272068	MT-C-GS A OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272069	MT-C-GL A OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized

HILTI angle connectors of MT System	**Annex A8** of European Technical Assessment ETA-21/1046
Product description Shape, dimensions and materials of angle connectors MT-C-GL OC, MT-C-GS A OC and MT-C-GL A OC	

Table A9: Shape, dimensions and materials of MT-U-GL1 OC, MT-C-GSP L OC and MT-C-GSP T OC

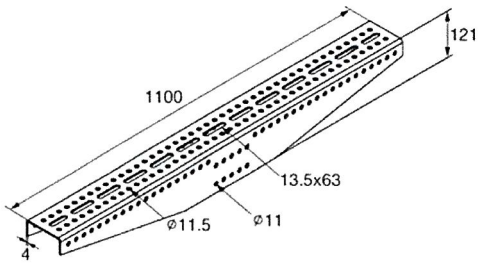
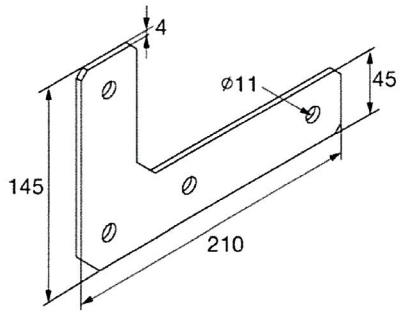
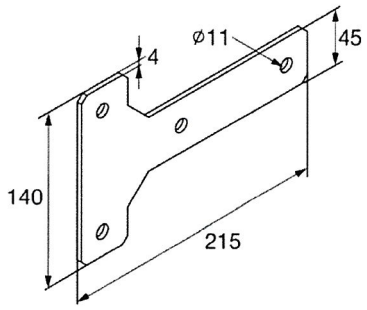
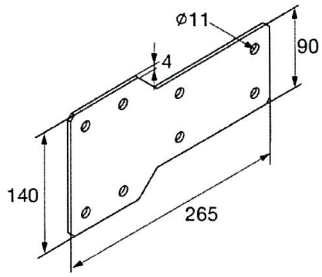
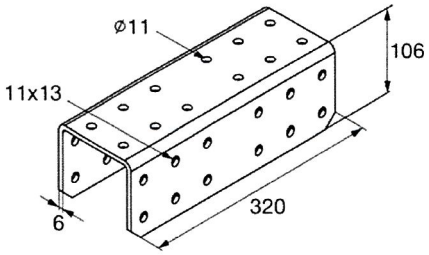
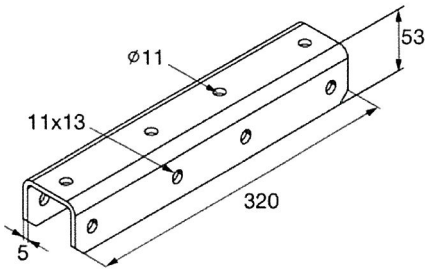
Shape and dimensions [mm]	Item number	Designation	Material
	2272070	MT-U-GL1 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272073	MT-C-GSP L OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272074	MT-C-GSP T OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized

Table A10: Shape, dimensions and materials of MT-C-GLP T OC, MT-ES-90 OC and MT-ES-70 OC

Shape and dimensions [mm]	Item number	Designation	Material
	2272075	MT-C-GLP T OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272076	MT-ES-90 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized
	2272078	MT-ES-70 OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized

HILTI angle connectors of MT System	**Annex A10**
Product description Shape, dimensions and materials of angle connectors MT-C-GLP T OC, MT-ES-90 OC and MT-ES-70 OC	of European Technical Assessment ETA-21/1046

Table A11: Shape, dimensions and materials of MT-AB A

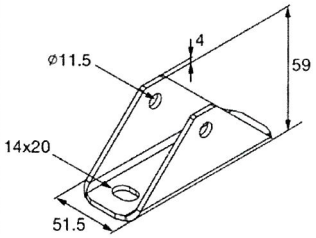
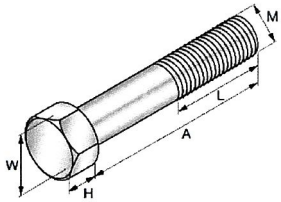
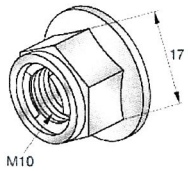
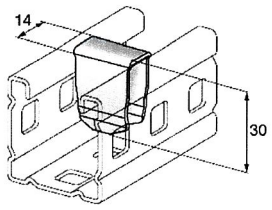
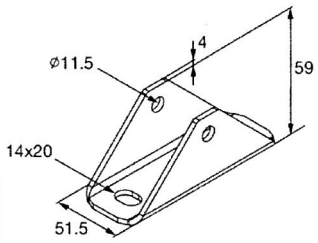
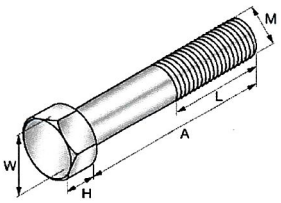
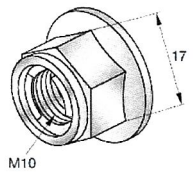
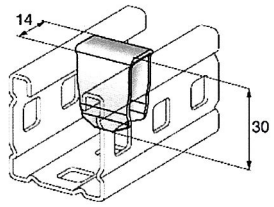
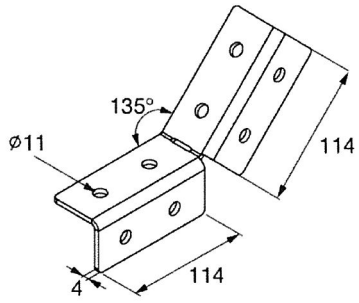
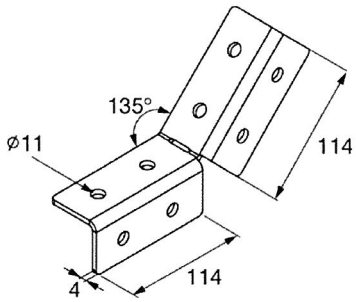
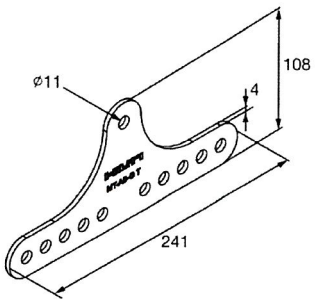
Shape and dimensions [mm]	Item number	Designation	Material
 1 x angle brace	2272111	MT-AB A	Angle bracer: Steel Q235B acc. to GB/T700 galvanized Fixing elements for MT-AB-A angle connector: Bolt: strength class 8.8 acc. to ISO 898-1, hot dip galvanized
 1 x hexagon bolt M10x65 L = 27 mm A = 65 mm H = 6 mm W = 17 mm			
 1 x Prevail torque hex nut M10- SL OC			Nut: strength class 8 acc. to ISO 898-2, galvanized
 1 x spacer			Steel Q235B acc. to GB/T700 zinc coated

Table A12: Shape, dimensions and materials of MT-AB A OC

Shape and dimensions [mm]	Item number	Designation	Material
 1 x angle brace	2272112	MT-AB A OC	Angle bracer: Steel Q235B GB/T700-2007.2 hot dip galvanized
 1 x hexagon bolt M10x65 L = 27 mm A = 65 mm H = 6 mm W = 17 mm			Fixing elements for MT-AB-A OC angle connector: Bolt: strength class 8.8 acc. to ISO 898-1, hot dip galvanized
 1 x Prevail torque hex nut M10- SL OC			Nut: strength class 8 acc. to ISO 898-2, galvanized
 1 x spacer			Steel Q235B acc. to GB/T700 zinc coated

HILTI angle connectors of MT System	**Annex A12** of European Technical Assessment ETA-21/1046
Product description Shape, dimensions and materials of angle connector MT-AB A OC	

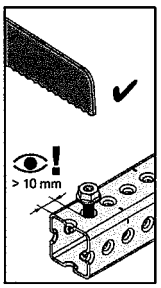
Table A13: Shape, dimensions and materials of MT-AB-LL2 45, MT-AB-LL2 45 OC and MT-AB-G T OC

Shape and dimensions [mm]	Item number	Designation	Material
	2272115	MT-AB-LL2 45	Steel Q235B acc. to GB/T700 galvanized
	2273585	MT-AB-LL2 45 OC	Steel Q235B acc. to GB/T700 hot dip galvanized
	2272116	MT-AB-G T OC	Steel Q355B acc. to GB/T 1591 hot dip galvanized

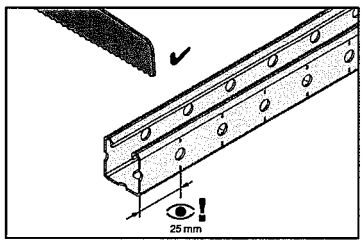
HILTI angle connectors of MT System	**Annex A13** of European Technical Assessment ETA-21/1046
Product description Shape, dimensions and materials of angle connectors MT-AB-LL2 45, MT-AB-LL2 45 OC and MT-AB-G T OC	

Specification of intended use

- HILTI angle connectors of MT System are used to transfer building services components loads such as ducts and equipment for water, heating, cooling, ventilation, electrical and other systems at ambient temperature.
  HILTI MT angle connectors are suitable for undertaking this load-bearing function under conditions described in Section 2 of this European Technical Assessment.
- The resistance of HILTI angle connectors set down in Annex C1 to C11 applies for static actions in the direction of the main axes X, Y, Z in connection with HILTI installation channels acc. to ETA-21/0414 and in combination with HILTI channel connectors MT system (ETA-21/1017) acc. to Annex B2 to B13.
- Installation channels acc. to tables in Annex B2 to B13 used in combination with HILTI angle connectors are cut to length centrally between the longholes or the roundholes at the channel marking.
- For closed installation channels the distance between the end of the profile and start of the round hole has to be minimum 10 mm.



- For open installation channels the distance between the end of the profile and center of the first round hole has to be minimum 25 mm.

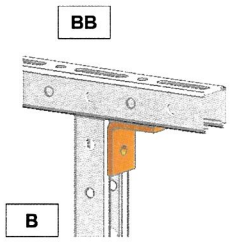
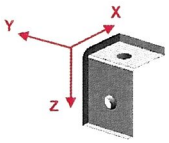
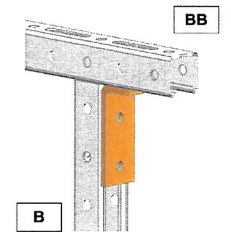
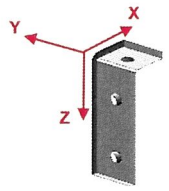
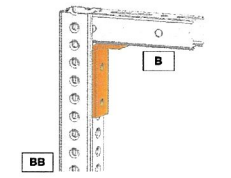
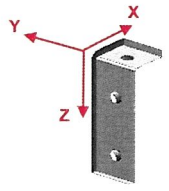


- The cross section and material properties of the installation channels combined with the angle connectors acc. to Annex B2 to Annex B13 are acc. to ETA-21/0414.
- For the channel connectors MT-TL M10 acc. to ETA-21/1017 a torque of 30 Nm applies.
- For the channel connectors MT-TL M10 OC acc. to ETA-21/1017 a torque of 40 Nm applies.

HILTI angle connectors of MT System	**Annex B1**
Intended use Specification	of European Technical Assessment ETA-21/1046

- For the channel connector MT-TFB OC acc. to ETA-21/1017 a torque of 60 Nm applies.
- The required torques may be applied with electrical or non-electrical devices.
- The characteristic resistances in Tables C1 to C41 apply for the configurations described in Annex B2 to Annex B13.
- Products differing in their designation only by the letters "OC" are interchangeable.
- Prior to installation, it must be ensured, the installation channel, the connection components, the fastening of the connectors to the base material and the base material itself, due to the load of the components to be supported, are suitable to withstand the resistance values of the angle connectors.
- The angle connectors has to be installed by appropriately qualified personnel and under the supervision of the site manager. The installation instruction of the manufacturer applies.

Table B

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
1		1x MT-C-L1		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	2 x MT-TL M10
2		1x MT-C-L1 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	2 x MT-TL M10 OC
3		1x MT-C-L2		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	3 x MT-TL M10
4		1x MT-C-L2 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	3 x MT-TL M10 OC
5		1x MT-C-L2 OC		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC Channel BB MT-70 S OC, MT-70 OC, MT-80 S OC, MT-80 OC, MT-90 S OC, MT-90 OC, MT-100 S OC, MT-100 OC	Connection to channel B: 1 x MT-TL M10 OC Connection to channel BB: 2 x MT-TFB OC

HILTI angle connectors of MT System	**Annex B2** of European Technical Assessment ETA-21/1046
Intended use Specification and system configuration	

Table B, cont.

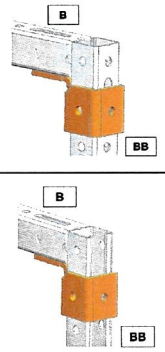
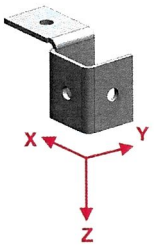
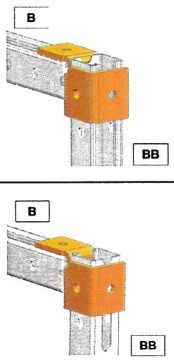
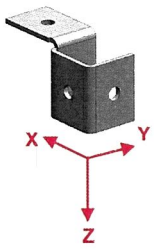
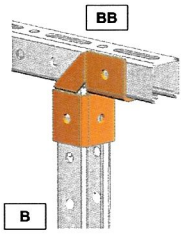
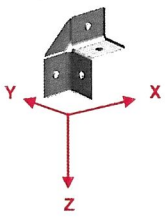
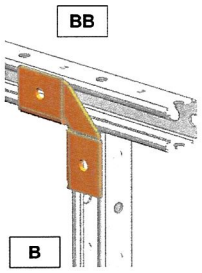
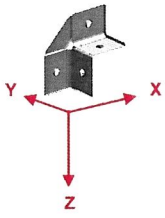
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
6		1x MT-C-T/1		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	2 x MT-TL M10
7		1x MT-C-T/1 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	2 x MT-TL M10 OC
8		1x MT-C-LL1		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	2 x MT-TL M10
		1x MT-C-LL1 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	2 x MT-TL M10 OC
9		1x MT-C-LL1		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	2 x MT-TL M10
		1x MT-C-LL1 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	2 x MT-TL M10 OC

Table B, cont.

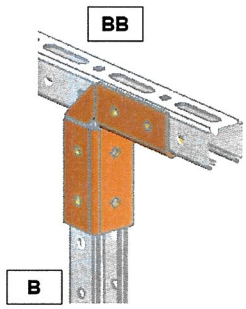
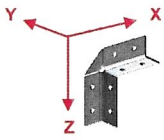
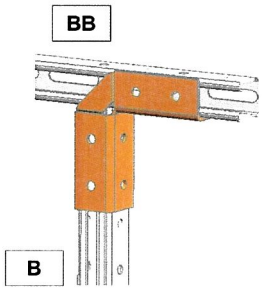
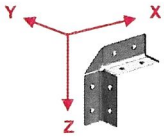
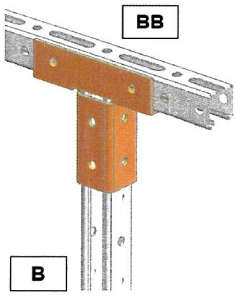
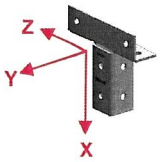
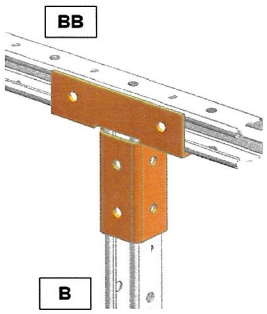
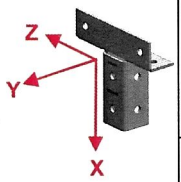
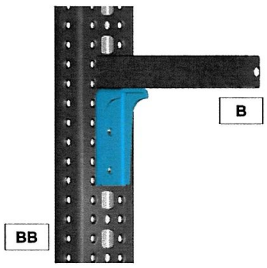
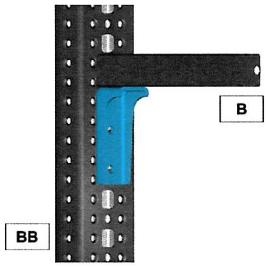
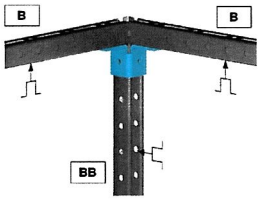
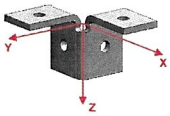
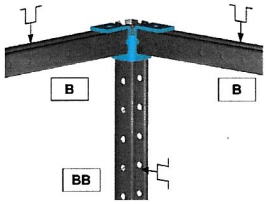
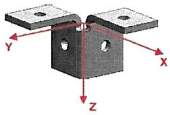
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
10		1x MT-C-LL2		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	3 x MT-TL M10
		1x MT-C-LL2 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	3 x MT-TL M10 OC
11		1x MT-C-LL2		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	3 x MT-TL M10
		1x MT-C-LL2 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	3 x MT-TL M10 OC
12		1x MT-C-T/2		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10
		1x MT-C-T/2 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
13		1x MT-C-T/2		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10
		1x MT-C-T/2 OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC
14		1x MT-C-T A		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, Channel BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	1 x MT-TL M10 OC 2 x MT-TFB OC
		1x MT-C-T A OC		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, Channel BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	1 x MT-TL M10 OC 2 x MT-TFB OC

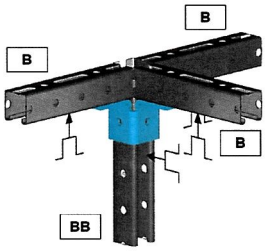
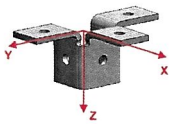
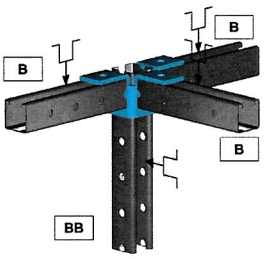
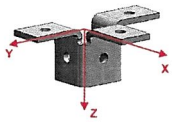
HILTI angle connectors of MT System	**Annex B5** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
15		1x MT-C-T 3D/2		Channel B: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D Channel BB : MT-40 S, MT-40, MT-50 S, MT-50	3 x MT-TL M10
16		1x MT-C-T 3D/2 OC		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC Channel BB: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	3 x MT-TL M10 OC
17		1x MT-C-T 3D/2		Channel B: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D Channel BB: MT-40 S, MT-40, MT-50 S, MT-50	3 x MT-TL M10
18		1x MT-C-T 3D/2 OC		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC Channel BB: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC	3 x MT-TL M10 OC

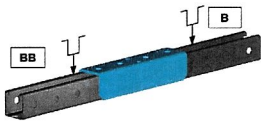
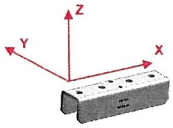
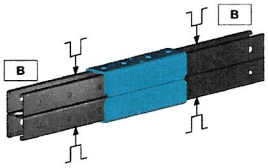
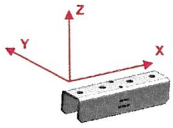
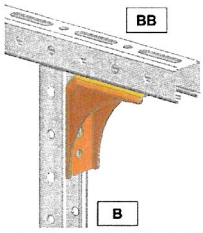
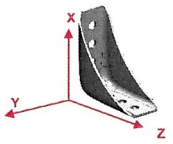
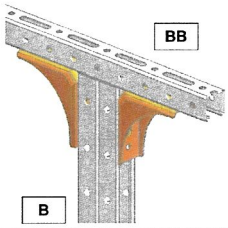
HILTI angle connectors of MT System	**Annex B6** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
19		1x MT-C-T 3D/3		Channel B: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D Channel BB: MT-40 S, MT-40, MT-50 S, MT-50	4 x MT-TL M10
20		1x MT-C-T 3D/3 OC		Channel B : MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC Channel BB: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	4 x MT-TL M10 OC
21		1x MT-C-T 3D/3		Channel B: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D Channel BB: MT-40 S, MT-40, MT-50 S, MT-50	4 x MT-TL M10
22		1x MT-C-T 3D/3 OC		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC Channel BB: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	4 x MT-TL M10 OC

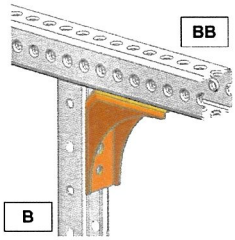
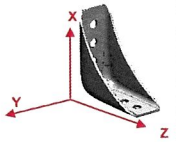
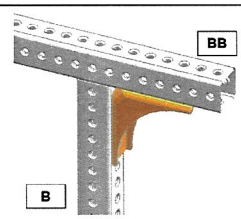
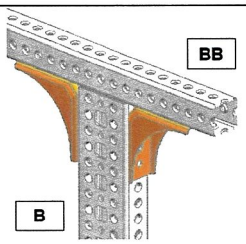
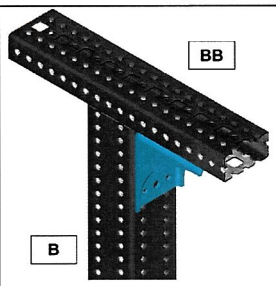
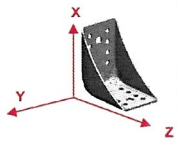
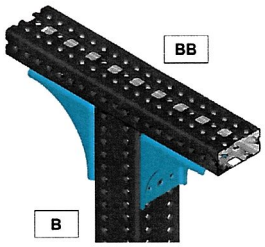
HILTI angle connectors of MT System	**Annex B7** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
23		1 x MT-ES-40		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10
24		1 x MT-ES-40		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC
25		2 x MT-ES-40		Channel B: MT-40D S, MT-40D	8 x MT-TL M10
26		2 x MT-ES-40		Channel B: MT-40D S OC, MT-40D OC	8 x MT-TL M10 OC
27		1 x MT-C-GS OC		Channel B and BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC
28		2 x MT-C-GS OC		Channel B: MT-40D S OC, MT-40D OC Channel BB : MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC

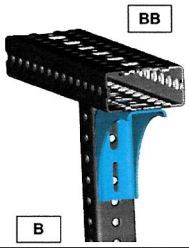
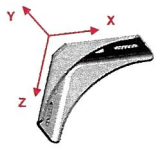
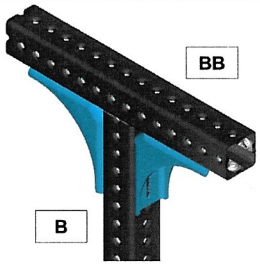
HILTI angle connectors of MT System	**Annex B8** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
29		1 x MT-C-GS OC		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC Channel BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	2 x MT-TL M10 OC 2 x MT-TFB OC
30		1 x MT-C-GS OC		Channel B and BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	4 x MT-TFB OC
31		2 x MT-C-GS OC		Channel B: MT-80 S OC, MT-80 OC Channel BB: MT-70 S OC, MT-70 OC	4 x MT-TFB OC
32		1 x MT-C-GL OC		Channel B and BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	8 x MT-TFB OC
33		2 x MT-C-GL OC		Channel B and BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	8 x MT-TFB OC

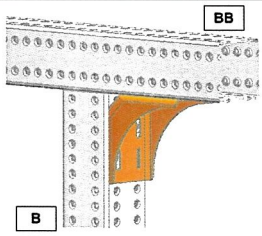
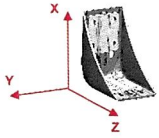
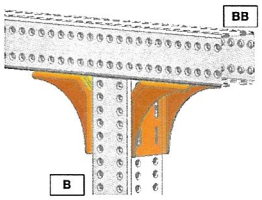
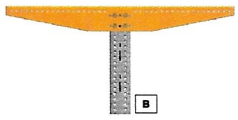
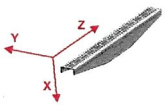
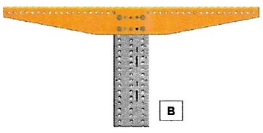
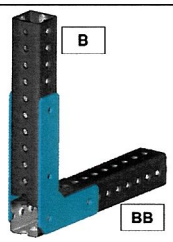
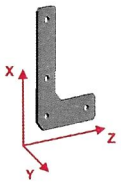
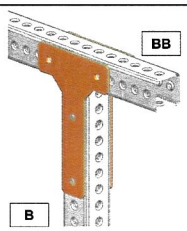
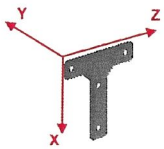
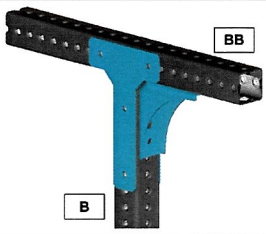
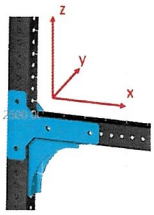
HILTI angle connectors of MT System	**Annex B9** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
34		1 x MT-C-GS A OC		Channel B: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC Channel BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	4 x MT-TFB OC
35		2 x MT-C-GS A OC		Channel B: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC Channel BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	8 x MT-TFB OC

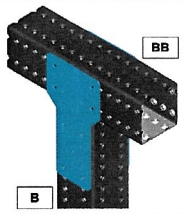
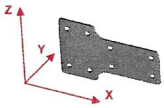
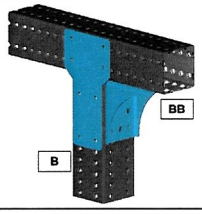
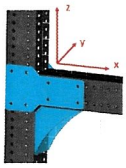
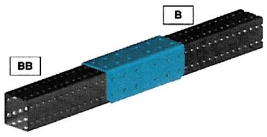
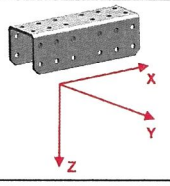
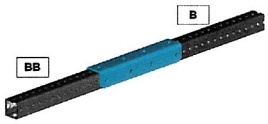
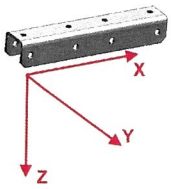
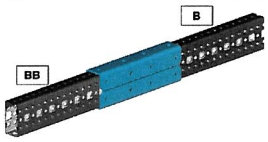
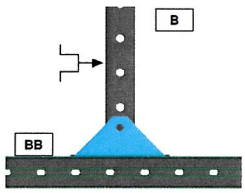
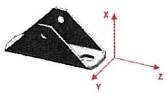
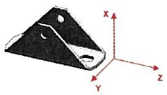
HILTI angle connectors of MT System	**Annex B10** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
36		1 x MT-C-GL A OC		Channel B and BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	8 x MT-TFB OC
37		2 x MT-C-GL A OC		Channel B and BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	16 x MT-TFB OC
38		1x MT-U-GL1 OC		Channel B: MT-90 S OC, MT-90 OC	8 x MT-TFB OC
39		1x MT-U-GL1 OC		Channel B: MT-100 S OC, MT-100 OC	8 x MT-TFB OC
40		2x MT-C-GSP L OC		Channel B and BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	8 x MT-TFB OC
41		2 x MT-C-GSP T OC		Channel B and BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	8 x MT-TFB OC
42		2 x MT-C-GSP T OC 1 x MT-C-GS OC		Channel B and BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	12 x MT-TFB OC

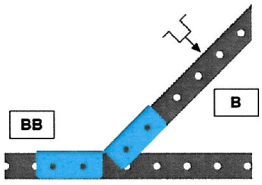
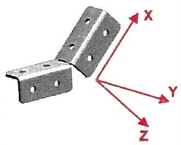
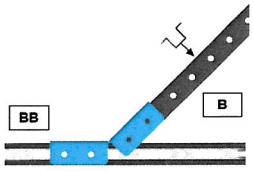
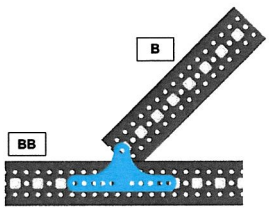
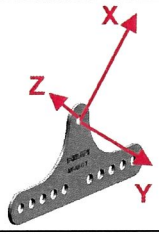
HILTI angle connectors of MT System	**Annex B11** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
43		2 x MT-C-GLP T OC		Channel B and BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	16 x MT-TFB OC
44		2 x MT-C-GLP T OC 1 x MT-C-GL OC		Channel B and BB: MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	24 x MT-TFB OC
45		1x MT-ES-90 OC		Channel B and BB: MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	36 x MT-TFB OC
46		1 x MT-ES-70 OC		Channel B and BB: MT-70 S OC, MT-70 OC	12 x MT-TFB OC
47		2 x MT-ES-70 OC		Channel B and BB: MT-80 S OC, MT-80 OC	24 x MT-TFB OC
48		1x MT-AB A		Channel B: MT-40 S, MT-40, MT-50 S, MT-50 Channel BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60	2 x MT-TFB OC
49		1x MT-AB A OC		Channel B: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, Channel BB: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC	2 x MT-TFB OC

HILTI angle connectors of MT System	**Annex B12** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table B, cont.

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels according to ETA-21/0414	Number and type of HILTI channel connectors according to ETA-21/1017
50		1x MT-AB-LL2 45		Channel B: MT-40 S, MT-40, MT-50 S, MT-50 Channel BB: MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10
51		1x MT-AB-LL2 45 OC		Channel B: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, Channel BB: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC
52		1x MT-AB-LL2 45		Channel B: MT-40 S, MT-40, MT-50 S, MT-50 Channel BB: MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10
53		1x MT-AB-LL2 45 OC		Channel B: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, Channel BB: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC
54		2 x MT-AB-G T OC		Channel B and BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	6 x MT-TFB OC

HILTI angle connectors of MT System	**Annex B13** of European Technical Assessment ETA-21/1046
Intended use System configuration	

Table C1: Characteristic resistance of the angle connectors MT-C-L1 and MT-C-L1 OC in connection with installation channels and channel connectors acc. to Annex B2, Table B, no. 1 and no. 2, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
9.91	10.25	0	0	10.25	9.91
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C2: Characteristic resistance of the angle connectors MT-C-L2 and MT-C-L2 OC in connection with installation channels and channel connectors acc. to Annex B2, Table B, no. 3, 4, 5, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
3.60	4.88	0.75	0.75	15.66	11.45
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
5.84	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C3: Characteristic resistance of the angle connectors MT-C-T/1 and MT-C-T/1 OC in connection with installation channels and channel connectors acc. to Annex B3, Table B, no. 6, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
8.47	9.94	0.76	0.76	6.07	4.77
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C4: Characteristic resistance of the angle connectors MT-C-T/1 and MT-C-T/1 OC in connection with installation channels and channel connectors acc. to Annex B3, Table B, no. 7, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
7.09	9.43	1.44	1.44	4.35	6.03
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C5: Characteristic resistance of the angle connectors MT-C-LL1 and MT-C-LL1 OC in connection with installation channels and channel connectors acc. to Annex B3, Table B, no. 8, at ambient temperature

$+ F_{x,Rk}$ [kN]	$- F_{x,Rk}$ [kN]	$+ F_{y,Rk}$ [kN]	$- F_{y,Rk}$ [kN]	$+ F_{z,Rk}$ [kN]	$- F_{z,Rk}$ [kN]
8.55	7.18	0.57	0.57	8.55	7.18
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
3.34	19.25	3.44			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C6: Characteristic resistance of the angle connectors MT-C-LL1 and MT-C-LL1 OC in connection with installation channels and channel connectors acc. to Annex B3, Table B, no. 9, at ambient temperature

$+ F_{x,Rk}$ [kN]	$- F_{x,Rk}$ [kN]	$+ F_{y,Rk}$ [kN]	$- F_{y,Rk}$ [kN]	$+ F_{z,Rk}$ [kN]	$- F_{z,Rk}$ [kN]
6.49	5.14	0.24	0.24	6.49	5.14
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
3.13	0	3.13			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C7: Characteristic resistance of the angle connectors MT-C-LL2 and MT-C-LL2 OC in connection with installation channels and channel connectors acc. to Annex B4, Table B, no. 10, at ambient temperature

$+ F_{x,Rk}$ [kN]	$- F_{x,Rk}$ [kN]	$+ F_{y,Rk}$ [kN]	$- F_{y,Rk}$ [kN]	$+ F_{z,Rk}$ [kN]	$- F_{z,Rk}$ [kN]
7.50	7.0	0.82	0.82	7.50	7.0
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
3.11	24.52	3.11			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C8: Characteristic resistance of the angle connectors MT-C-LL2 and MT-C-LL2 OC in connection with installation channels and channel connectors acc. to Annex B4, Table B, no. 11, at ambient temperature

$+ F_{x,Rk}$ [kN]	$- F_{x,Rk}$ [kN]	$+ F_{y,Rk}$ [kN]	$- F_{y,Rk}$ [kN]	$+ F_{z,Rk}$ [kN]	$- F_{z,Rk}$ [kN]
7.38	8.22	0.61	0.61	7.38	8.22
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
3.11	5.48	3.11			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C9: Characteristic resistance of the angle connectors MT-C-T/2 and MT-C-T/2 OC in connection with installation channels and channel connectors acc. to Annex B4, Table B, no. 12, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
13.6	11.28	1.48	1.48	3.57	3.57
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
8.81	9.38	3.75			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C10 : Characteristic resistance of the angle connectors MT-C-T/2 and MT-C-T/2 OC in connection with installation channels and channel connectors acc. to Annex B5, Table B, no. 13, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
13.14	8.96	0.92	0.92	9.82	9.82
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
7.8	9.38	3.18			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C11: Characteristic resistance of the angle connectors MT-C-T A and MT-C-T A OC in connection with installation channels and channel connectors acc. to Annex B5, Table B, no. 14, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
14	8.8	3.5	3.5	2.8	2.8
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C12: Characteristic resistance of the angle connectors MT-C-T 3D/2 and MT-C-T 3D/2 OC in connection with installation channels and channel connectors acc. to Annex B6, Table B, no. 15 and no. 16, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
3.79	5.69	1.21	1.21	6.52	3.68
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C13: Characteristic resistance of the angle connectors MT-C-T 3D/2 and MT-C-T 3D/2 OC in connection with installation channels and channel connectors acc. to Annex B6, Table B, no. 17 and no. 18, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
3.38	5.69	2.42	2.29	4.24	5.86
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C14: Characteristic resistance of the angle connectors MT-C-T 3D/3 and MT-C-T 3D/3 OC in connection with installation channels and channel connectors acc. to Annex B7, Table B, no. 19 and no. 20, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
5.6	5.0	1.1	1.1	6.3	3.2
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C15: Characteristic resistance of the angle connectors MT-C-T 3D/3 and MT-C-T 3D/3 OC in connection with installation channels and channel connectors acc. to Annex B7, Table B, no. 21 and no. 22, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
5.80	5.50	2.08	2.08	3.2	6.3
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C16: Characteristic resistance of the angle connectors MT-ES-40 and MT-ES-40 OC in connection with installation channels and channel connectors acc. to Annex B8, Table B, no. 23 and no. 24, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
14.0	14.0	0.78	0.78	14.0	14.0
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
1.58	63.67	6.25			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C17: Characteristic resistance of the angle connectors MT-ES-40 and MT-ES-40 OC in connection with installation channels and channel connectors acc. to Annex B8, Table B, no. 25 and no. 26, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
28.0	28.0	1.56	1.56	28.0	28.0
$M_{x,Rk}$ [kNcm]	$M_{y,Rk}$ [kNcm]	$M_{z,Rk}$ [kNcm]			
3.15	80.82	12.50			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C18: Characteristic resistance of the angle connectors MT-C-GS OC in connection with installation channels and channel connectors acc. to Annex B8, Table B, no. 27, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
8.81	13.62	1.11	1.11	1.1	7.27
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.08	0.52	0.41	0.11		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C19: Characteristic resistance of the angle connectors MT-C-GS OC in connection with installation channels and channel connectors acc. to Annex B8, Table B, no. 28, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
20.52	17.85	1.89	1.89	15.85	15.85
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
0.343	1.612	0.189			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C20: Characteristic resistance of the angle connectors MT-C-GS OC in connection with installation channels and channel connectors acc. to Annex B9, Table B, no. 29, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
9.19	15.37	2.29	2.29	7.27	7.97
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.098	0.517	0.393	0,393		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C21: Characteristic resistance of the angle connectors MT-C-GS OC in connection with installation channels and channel connectors acc. to Annex B9, Table B, no. 30, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
10.41	8.03	4.05	4.0	18.38	11.70
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.14	0.53	0.38	0.12		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C22: Characteristic resistance of the angle connectors MT-C-GS OC in connection with installation channels and channel connectors acc. to Annex B9, Table B, no. 31, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
30.9	58.75	11.65	11.65	45.47	45.47
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
1.16	2.42	0.41			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C23: Characteristic resistance of the angle connectors MT-C-GL OC in connection with installation channels and channel connectors acc. to Annex B9, Table B, no. 32, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
27.25	44.78	19.38	19.38	24.14	22.24
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.70	1.16	1.09	1.09		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C24: Characteristic resistance of the angle connectors MT-C-GL OC in connection with installation channels and channel connectors acc. to Annex B9, Table B, no. 33, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
54.53	103.9	38.86	38.36	41.74	41.74
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
2.62	2.98	2.19			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C25: Characteristic resistance of the angle connectors MT-C-GS A OC in connection with installation channels and channel connectors acc. to Annex B10, Table B, no. 34, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
10.44	8.04	4.01	4.03	18.39	11.69
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.17	0.47	0.39	0.14		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C26: Characteristic resistance of the angle connectors MT-C-GS A OC in connection with installation channels and channel connectors acc. to Annex B10, Table B, no. 35, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
27.76	58.77	11.81	11.81	45.47	45.47
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
1.07	2.43	0.43			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C27: Characteristic resistance of the angle connectors MT-C-GL A OC in connection with installation channels and channel connectors acc. Annex B11, Table B, no. 36, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
27.6	44.5	19.4	19.4	24.9	22.3
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.72	1.12	1.01	0.84		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C28: Characteristic resistance of the angle connectors MT-C-GL A OC in connection with installation channels and channel connectors acc. to Annex B11, Table B, no. 37, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
54.64	103.69	39.19	39.19	41.72	41.72
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
2.61	2.98	2.43			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C29: Characteristic resistance of the angle connectors MT-U-GL1 OC in connection with installation channels and channel connectors acc. Annex B11, Table B, no. 38, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
0	113.5	11.16	11.16	85.53	85.53
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
16.51	4.91	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C30: Characteristic resistance of the angle connectors MT-U-GL1 OC in connection with installation channels and channel connectors acc. to Annex B11, Table B, no. 39, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
0	142.76	24.62	24.62	141.24	141.24
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
18.82	7.23	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C31: Characteristic resistance of the angle connectors MT-C-GSP L OC in connection with installation channels and channel connectors acc. Annex B11, Table B, no. 40, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
22.58	23.0	5.84	5.84	17.98	18.34
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.52	1.3	1.27	0.68		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C32: Characteristic resistance of the angle connectors MT-C-GSP T OC in connection with installation channels and channel connectors acc. to Annex B11, Table B, no. 41, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
80.72	81.49	9.68	9.68	11.71	11.71
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
0.43	1.37	0.63			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C33: Characteristic resistance of the angle connectors MT-C-GSP T OC and MT-C-GS OC in connection with installation channels and channel connectors acc. to Annex B11, Table B, no. 42, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
71.2	70.1	12.3	12.3	23.5	25.2
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
0.84	2.19	2.04	1.21		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C34: Characteristic resistance of the angle connectors MT-C-GLP T OC in connection with installation channels and channel connectors acc. to Annex B12, Table B, no. 43, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
142.95	143.06	13.92	13.92	41.2	41.2
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
1.4	5.4	1.8			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C35: Characteristic resistance of the angle connectors MT-C-GLP T OC and MT-C-GL OC in connection with installation channels and channel connectors acc. to Annex B12, Table B, no. 44, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
115.6	145.8	30.0	30.0	73.4	75.0
$M_{x,Rk}$ [kNm]	$+M_{y,Rk}$ [kNm]	$-M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]		
3.58	6.4	6.4	5.6		

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C36: Characteristic resistance of the angle connectors MT-ES-90 OC in connection with installation channels and channel connectors acc. to Annex B12, Table B, no. 45, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
66.5	68.5	7	7	7	7.5
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
3.5	5.23	2.33			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C37: Characteristic resistance of the angle connectors MT-ES-70 OC in connection with installation channels and channel connectors acc. to Annex B12, Table B, no. 46, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
87.0	91.0	5.0	5.0	9.0	9.0
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
1.87	4.42	2.26			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C38: Characteristic resistance of the angle connectors MT-ES-70 OC in connection with installation channels and channel connectors acc. Annex B12, Table B, no. 47, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
39.5	40.0	3.5	3.5	2.5	2.5
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
0.61	2.44	1.48			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C39: Characteristic resistance of the angle connectors MT-AB-A and MT-AB-A OC in connection with installation channels and channel connectors acc. to Annex B12, Table B, no. 48 and no. 49, at ambient temperature

$+F_{x,Rk}$ [kN]	$-F_{x,Rk}$ [kN]	$+F_{y,Rk}$ [kN]	$-F_{y,Rk}$ [kN]	$+F_{z,Rk}$ [kN]	$-F_{z,Rk}$ [kN]
18.06	18.06	0	0	0	0
$M_{x,Rk}$ [kNm]	$M_{y,Rk}$ [kNm]	$M_{z,Rk}$ [kNm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C40: Characteristic resistance of the angle connectors MT-AB-LL2 45 and MT-AB-LL2 45 OC in connection with installation channels and channel connectors acc. to Annex B13, Table B, no. 50, no. 51, no. 52 and no. 53, at ambient temperature

$+ F_{x,Rk}$ [kN]	$- F_{x, Rk}$ [kN]	$+ F_{y, Rk}$ [kN]	$- F_{y, Rk}$ [kN]	$+ F_{z, Rk}$ [kN]	$- F_{z, Rk}$ [kN]
10.98	11.50	0	0	0	0
$M_{x, Rk}$ [kNm]	$M_{y, Rk}$ [kNm]	$M_{z, Rk}$ [kNm]			
0	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Table C41: Characteristic resistance of the angle connectors MT-AB-G T OC in connection with installation channels and channel connectors acc. to Annex B13, Table B, no. 54, at ambient temperature

$+ F_{x,Rk}$ [kN]	$- F_{x, Rk}$ [kN]	$+ F_{y, Rk}$ [kN]	$- F_{y, Rk}$ [kN]	$+ F_{z, Rk}$ [kN]	$- F_{z, Rk}$ [kN]
32.03	32.99	0	0	6.44	6.44
$M_{x, Rk}$ [kNm]	$M_{y, Rk}$ [kNm]	$M_{z, Rk}$ [kNm]			
1.83	0	0			

For performance of installation channels and channel connectors see ETA-21/0414 and ETA-21/1017

Partial safety coefficients (provided that no other national regulations apply):

Steel: $\gamma_{M0} = 1.0$, $\gamma_{M1} = 1.1$, $\gamma_{M2} = 1.25$ in case of calculations or $\gamma_M = F_{Rk} / F_{Rd}$ in case of determining characteristic and designed values based on tests.