



MT SYSTEM ANGEL CONNECTORS

ETA-24/0643 (14.08.2024)



**European Technical
Assessment****ETA-24/0643
of 14/08/2024***English translation prepared by CSTB - Original version in French language***General Part****Technical Assessment Body issuing the European Technical Assessment:**

Centre Scientifique et Technique du Bâtiment (CSTB)

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
Feldkircherstraße 100
9494 Schaan
FÜRSTENTUM LIECHTENSTEIN

Manufacturing plants:

L 1005049, L 1124303, L 1027881, L 1087643

This European Technical
Assessment contains:58 pages including 53 pages which form an integral part of
this assessmentThis European Technical
Assessment is issued in
accordance with Regulation (EU)
No 305/2011, on the basis of:European Assessment Document (EAD)
280016-00-0602 version June 2020

This version replaces:

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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-L2E FL, MT-C-L2E FL OC, MT-C-T/1, MT-C-T/1 OC, MT-C-LL1, MT-C-LL1 OC, MT-C-LL1 FL, MT-C-LL1 FL OC, MT-C-Q1 FL, MT-C-Q1 FL OC, MT-C-LL2, MT-C-LL2 OC, MT-C-LL2 FL, MT-C-LL2 FL OC, MT-C-T/2, MT-C-T/2 OC, MT-C-T/2 FL, MT-C-T/2 FL 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-ES-40 FL, MT-ES-40 FL 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, MT-AB-G T OC, MT-CC-30, MT-CC-40/50, MT-CC-40/50 OC, MT-CC-40/50 FL, MT-CC-40/50 FL OC, MT-CC-40/50X2, MT-CC-40/50X2 OC, MT-CC-60, MT-CC-60 OC, MT-CC-40D, MT-CC-40D OC, MT-CC-70 OC, MT-CT-H2, MT-CT-H2 OC, MT-CT-H5, MT-CT-H5 OC, MT-CT-T, MT-CT-T OC, MT-CT-H4, MT-CT-H4 OC, MT-ES-60, MT-ES-60 OC, MT-C-GLP X A OC, MT-C-GLP T A OC, MT-C-GSP T A OC, MT-C-GSP L A OC, MT-C-LS and MT-C-LS OC.

MT-C-L1, MT-C-L1 OC, MT-C-Q1 FL and MT-C-Q1 FL 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-Q1 FL and MT-C-Q1 FL OC angle connectors are pre-assembled with channel connectors

MT-C-L2, MT-C-L2 OC, MT-C-L2E FL and MT-C-L2E FL 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-L2E FL and MT-C-L2E FL OC angle connectors are pre-assembled with channel connectors.

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, MT-C-LL2 OC, MT-C-LL2 FL and MT-C-LL2 FL 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-LL2 FL and MT-C-LL2 FL OC angle connectors are pre-assembled with channel connectors.

MT-C-T/2, MT-C-T/2 OC, MT-C-T/2 FL and MT-C-T/2 FL 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/2 FL and MT-C-T/2 FL OC are pre-assembled with channel connectors

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, MT-ES-40 OC, MT-ES-40 FL and MT-ES-40 FL OC connectors are made of zinc coated steel. The connectors are in U-shape with six openings on the base side. MT-ES-40 FL and MT-ES-40 FL OC are pre-assembled with channel connectors

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 L A OC connector is made of flat zinc coated steel in L-shape with 6 long holes.

MT-C-GSP T OC angle connector is made of flat zinc coated steel in T-shape with four openings in total. MT-C-GSP T A OC connector is made of flat zinc coated steel in T-shape with 6 long holes.

MT-C-GLP T OC angle connector is made of flat zinc coated steel in T-shape with eight openings in total. MT-C-GLP T A OC connector is made of flat zinc coated steel in T-shape with 12 long holes.

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.

MT-CC-30, MT-CC-40/50, MT-CC-40/50 OC, MT-CC-40/50 FL, MT-CC-40/50 FL OC, MT-CC-40/50X2, MT-CC-40/50X2 OC, MT-CC-60, MT-CC-60 OC, MT-CC-40D, MT-CC-40D OC and MT-CC-70 OC connectors are made of zinc coated steel. The connectors are in U-shape with right-angled flanges on each side and with various openings. MT-CC-40/50 FL and MT-CC-40/50 FL OC angle connectors are pre-assembled with channel connectors

MT-CT-H2 and MT-CT-H2 OC connectors are made of zinc coated flat steel in T-shape with two round holes.

MT-CT-H5 and MT-CT-H5 OC connectors are made of zinc coated flat steel in cross-shape with 5 round holes.

MT-CT-T and MT-CT-T OC connectors are made of zinc coated flat steel in cross-shape with 4 round holes.

MT-CT-H4 and MT-CT-H4 OC connectors are made of zinc coated steel in rectangular shape with 4 round holes.

MT-ES-60 and MT-ES-60 OC connectors are made of zinc coated steel. The connectors are in U-shape with 6 openings on the base side.

MT-C-GLP X A OC connector is made of flat zinc coated steel in cross shape with 8 long holes.

MT-C-LS and MT-C-LS OC connectors are made of zinc coated steel. The connectors have a rectangular cross-section with various round holes and a square opening in the top and bottom flange.

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

2 Specification of the intended use

The performances given in clause 3 are only valid if HILTI installation channels of MT System 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 installation channels of MT System of 50 years when installed in the works (provided that the installation systems products are subject to appropriate installation). 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 product is intended to be used in:

- a) installations for the support of sprinkler kits,
- b) installations for the support of technical building equipment in general,
- c) installations for the support of pipes for the transportation of water not intended for human consumption,
- d) installations for the support of pipes for the transport of gas/fuel intended for the supply of building heating / cooling systems.

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

3.1 Safety in case of fire (BWR 2)

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

3.2 Safety and accessibility in use (BWR 4)

No.	Essential characteristic	Performance
4	Shape	See Annex A
5	Dimensions	See Annex A
6	Material	See Annex A
7	Characteristic resistance s	See Annex C

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

In accordance with the European Assessment Document EAD 280016-00-0602, the following legal bases apply:

- In case of intended use a) specified in Section 2:
Commission Decision N° 96/577/EC as amended by Commission Decision 2002/592/EC:
The system is 1
- In case of intended use b) specified in Section 2:
Commission Decision N° 97/161/EC de la Commission:
The system is 2+
- In case of intended use c) specified in Section 2:
Commission Decision N° 999/472/EC as amended by Commission Decision 2001/596/EC:
The system is 3
- In case of intended use d) specified in Section 2:
Commission Decision N° 999/472/EC as amended by Commission Decision 2001/596/EC:
The system is 4

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

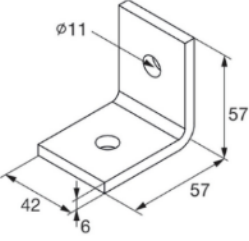
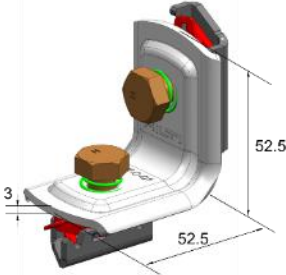
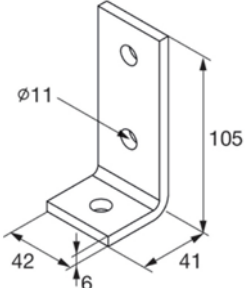
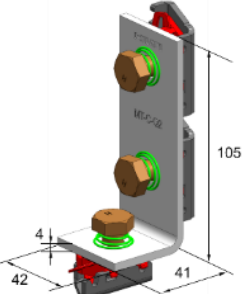
The technical details necessary for the implementation of the system for the assessment and verification of constancy of performance are laid down in the control plan (confidential part of this European Technical Assessment) deposited at Centre Scientifique et Technique du Bâtiment.

The manufacturer shall, on the basis of a contract, involve a notified body approved in the field of supporting systems for issuing the certificate of conformity CE based on the control plan.

The original French version is signed by

Le chef de division, Loic PAYET

Table A1: Shape, dimensions and materials of of MT-C-L1, MT-C-Q1 FL, MT-C-L2 and MT-C-L2 FL Hilti angle connectors

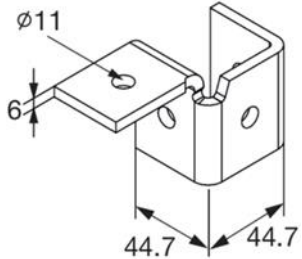
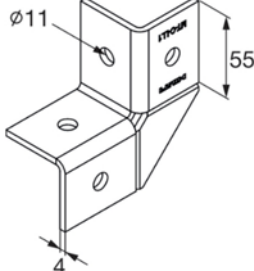
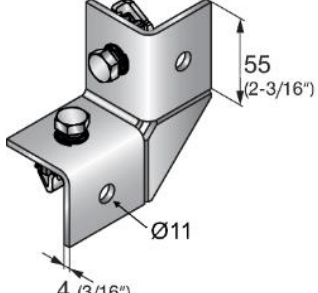
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2271514	MT-C-L1	Q355B acc. to GB/T 1591 galvanized	
2271516	MT-C-L1 OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2399638	MT-C-Q1 FL	DD11 MOD acc. to EN1090 or equivalent as defined in HN555-4 galvanized	
2399673	MT-C-Q1 FL OC	DD11 MOD acc. to EN1090 or equivalent as defined in HN555-4 hot dip galvanized	
2271518	MT-C-L2	Q355B acc. to GB/T 1591 galvanized	
2271519	MT-C-L2 OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2399666	MT-C-L2E FL	Q355B acc. to GB/T 1591 galvanized	
2399678	MT-C-L2E FL OC	Q355B acc. to GB/T 1591 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A1

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

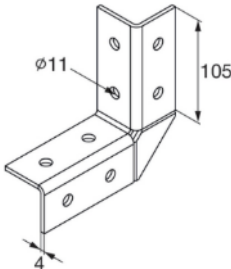
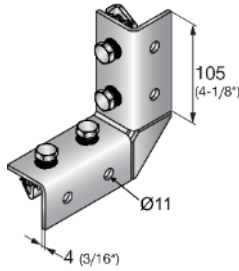
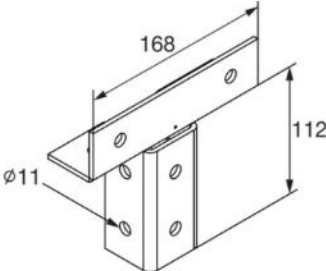
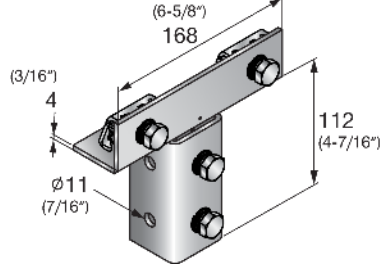
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272040	MT-C-T/1	Q355B acc.to GB/T 1591 galvanized	
2272042	MT-C-T/1 OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2272047	MT-C-LL1	Q235B acc. to GB/T 700 galvanized	
2272049	MT-C-LL1 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2399637	MT-C-LL1 FL	Q235B acc. to GB/T 700 galvanized	
2399672	MT-C-LL1 FL OC	Q235B acc. to GB/T 700 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A2

Table A3: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2 Hilti angle connectors

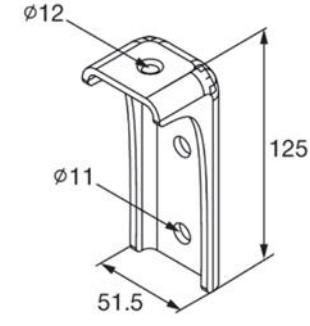
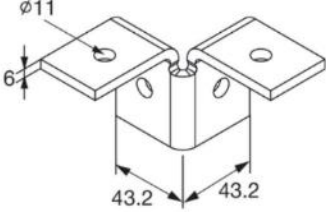
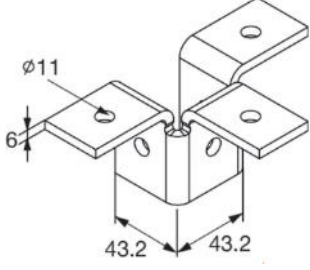
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272051	MT-C-LL2	Q235B acc. to GB/T 700 galvanized	
2272053	MT-C-LL2 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2399661	MT-C-LL2 FL	Q235B acc. to GB/T 700 galvanized	
2399676	MT-C-LL2 FL OC	Q235B acc. to GB/T 700 hot dip galvanized	
2272054	MT-C-T/2	Q235B acc. to GB/T 700 galvanized	
2272055	MT-C-T/2 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2399668	MT-C-T/2 FL	Q235B acc. to GB/T 700 galvanized	
2399680	MT-C-T/2 FL OC	Q235B acc. to GB/T 700 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A3

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

Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272056	MT-C-T A	Q355B acc. to GB/T 1591 galvanized	
2272057	MT-C-T A OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2272058	MT-C-T 3D/2	Q355B acc. to GB/T 1591 galvanized	
2272059	MT-C-T-3D/2 OC	Q355B acc. to GB/T 1591 galvanized	
2272060	MT-C-T 3D/3	Q355B acc. to GB/T 1591 galvanized	
2272061	MT-C-T 3D/3 OC	Q355B acc. to GB/T 1591 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A4

Table A5: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2 Hilti angle connectors

Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272062	MT-ES-40	Q235B acc. to GB/T 700 galvanized	
2272063	MT-ES-40 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2399669	MT-ES-40 FL	Q235B acc. to GB/T 700 galvanized	
2399681	MT-ES-40 OC FL	Q235B acc. to GB/T 700 hot dip galvanized	
2322415	MT-ES-60	Q235B acc. to GB/T 700 galvanized	
2322416	MT-ES-60 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2272078	MT-ES-70 OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2272076	MT-ES-90 OC	Q355B acc. to GB/T 1591 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A5

Table A6: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2 Hilti angle connectors

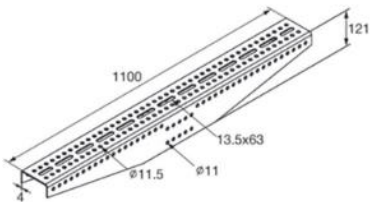
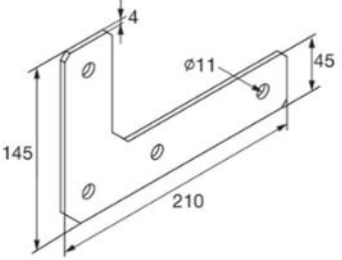
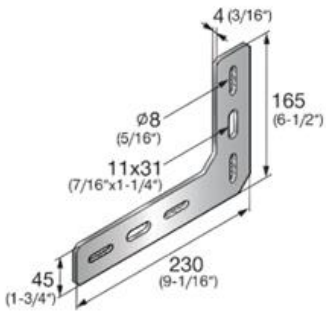
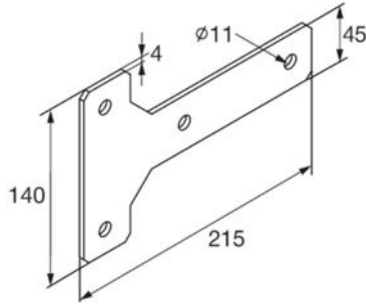
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272064	MT-C-GS OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2272068	MT-C-GS A OC		
2272066	MT-C-GL OC		
2272069	MT-C-GL A OC		

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A6

Table A7: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2 Hilti angle connectors

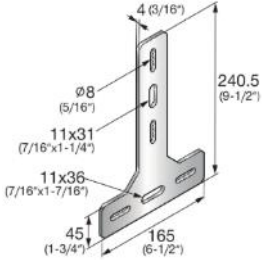
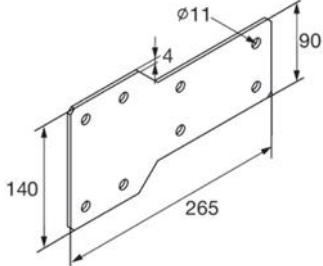
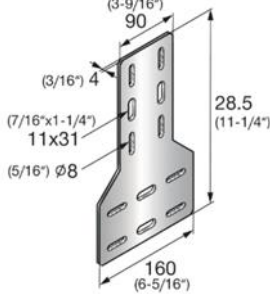
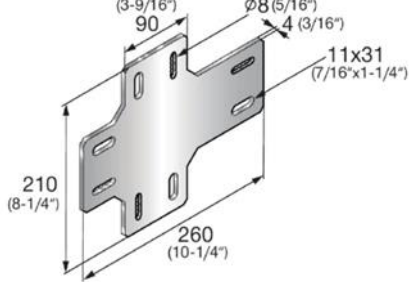
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272070	MT-U-GL1 OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2272073	MT-C-GSP L OC		
2332786	MT-C-GSP L A OC		
2272074	MT-C-GSP T OC		

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A7

Table A8: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2Hilti angle connectors

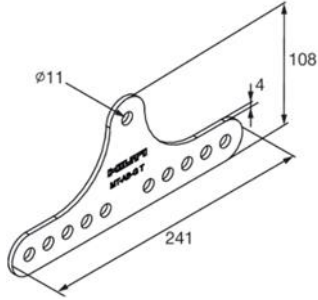
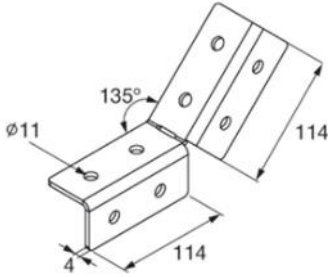
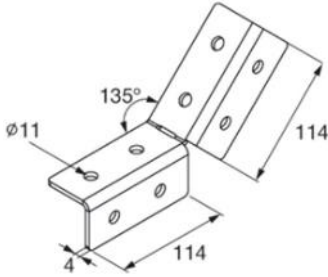
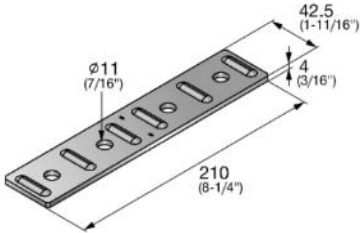
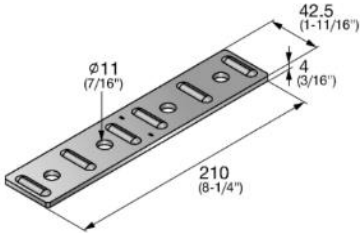
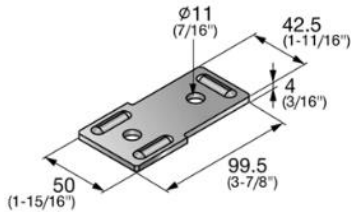
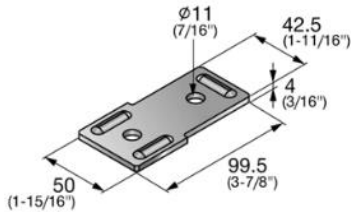
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2332785	MT-C-GSP T A OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2272075	MT-C-GLP T OC		
2332784	MT-C-GLP T A OC		
2332783	MT-C-GLP X A OC		

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A8

Table A9: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2Hilti angle connectors

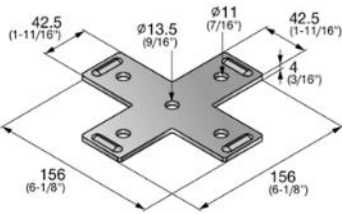
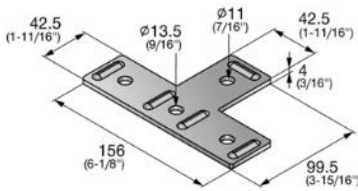
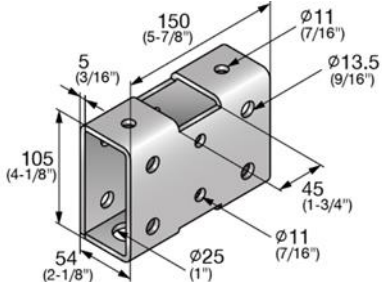
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272116	MT-AB-G T OC	Q355B acc. to GB/T 1591 hot dip galvanized	
2272115	MT-AB-LL2 45	Q235B acc. to GB/T 700 galvanized	
2273585	MT-AB-LL2 45 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2322408	MT-CT-H4	Q235B acc. to GB/T 700 galvanized	
2322412	MT-CT-H4 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2322405	MT-CT-H2	Q235B acc. to GB/T 700 galvanized	
2322409	MT-CT-H2 OC	Q235B acc. to GB/T 700 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A9

Table A10: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2Hilti angle connectors

Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2322406	MT-CT-H5	Q235B acc. to GB/T 700 galvanized	
2322410	MT-CT-H5 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2322407	MT-CT-T	Q235B acc. to GB/T 700 galvanized	
2322411	MT-CT-T OC	Q235B acc. to GB/T 700 hot dip galvanized	
2322419	MT-C-LS	Q235B acc. to GB/T 700 galvanized	
2322422	MT-C-LS OC	Q235B acc. to GB/T 700 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A10

Table A11: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2Hilti angle connectors

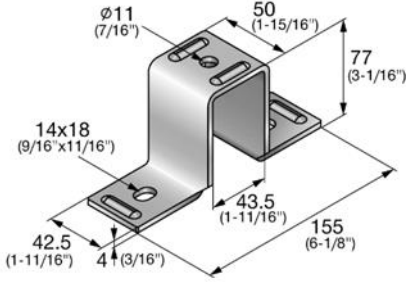
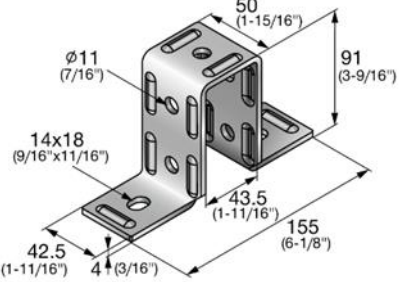
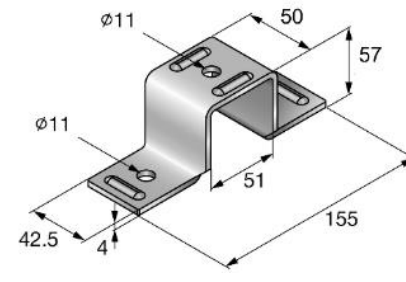
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2322427	MT-CC-30	Q235B acc. to GB/T 700 galvanized	
2322429	MT-CC-40/50	Q235B acc. to GB/T 700 galvanized	
2322391	MT-CC-40/50 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2399667	MT-CC-40/50 FL	Q235B acc. to GB/T 700 galvanized	
2399679	MT-CC-40/50 FL OC	Q235B acc. to GB/T 700 hot dip galvanized	
2322392	MT-CC-40/50X2	Q235B acc. to GB/T 700 galvanized	
2322393	MT-CC-40/50X2 OC	Q235B acc. to GB/T 700 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A11

Table A12: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2Hilti angle connectors

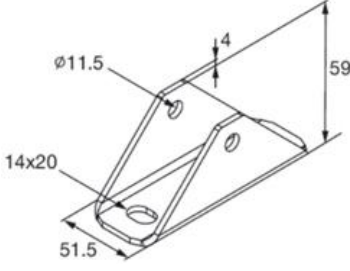
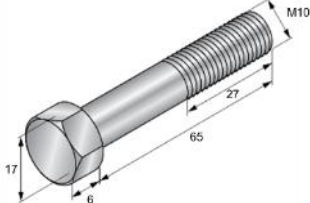
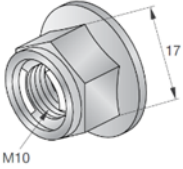
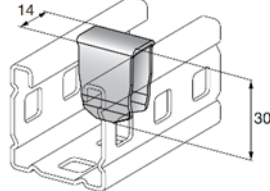
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2322396	MT-CC-60	Q235B acc. to GB/T 700 galvanized	
2322431	MT-CC-60 OC	Q235B acc. to GB/T 700 hot dip galvanized	
2322398	MT-CC-40D	Q235B acc. to GB/T 700 galvanized	
2322399	MT-CC-40D OC	Q235B acc. to GB/T 700 hot dip galvanized	
2322404	MT-CC-70 OC	Q235B acc. to GB/T 700 hot dip galvanized	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A12

Table A13: Shape, dimensions and materials of MT-C-LL2, MT-C-T/2Hilti angle connectors



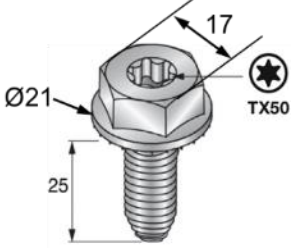
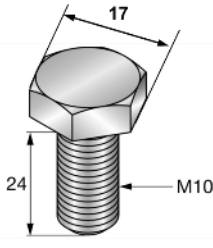
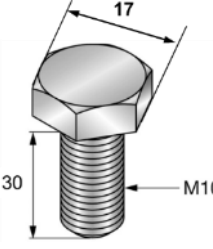
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2346395	MT-AB A set	Steel Q235B acc. to GB/T700 galvanized	
2346396	MT-AB A OC set	Steel Q235B acc. to GB/T700 hot dip galvanized	
Additional components of MT-AB A set and MT-AB A OC set			
-	-	Bolt M10x65: strength class 8.8 acc. to ISO 898-1, hot dip galvanized	
		Flanged nut: strength class 8 acc. to ISO 898-2, galvanized	
		Spacer Steel Q235B acc. to GB/T700 zinc coated	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A13

Table A14: Dimensions and materials of Hilti MT-TL M10, MT-TL M10 OC, MT-TFB OC, MT-TLB, MT-TLB OC, MT-TLB 30 and MT-TLB 30 OC channel connector

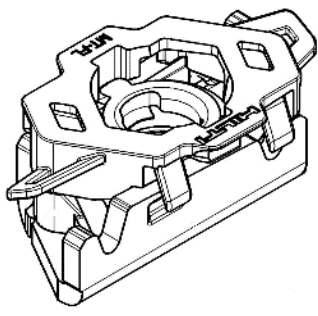
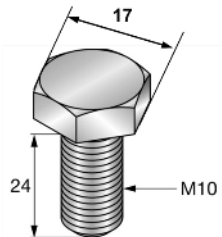
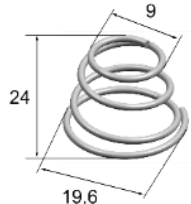
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2272080	MT-TL M10	Steel part: S460MC acc. to EN10149-2 or equivalent as defined in HN709 zinc coated Plastic part: Polyamid	
2272082	MT-TL M10 OC	Steel part: S460MC acc. to EN10149-2 or equivalent as defined in HN709 zinc coated with organic topcoat Plastic part: Polyamid	
2272084	MT-TFB OC	C10B21 acc. to SAE J403, Surface hardness min. 530 HV, Core hardness min. 32-39 HRC zinc coated with organic topcoat	
2273254	MT-TLB	strength class 8.8 acc. to EN ISO 898-1, zinc coated	
2273256	MT-TLB OC	strength class 8.8 acc. to EN ISO 898-1, zinc coated with organic topcoat	
2282190	MT-TLB 30	strength class 8.8 acc. to EN ISO 898-1, zinc coated	
2282191	MT-TLB 30 OC	strength class 8.8 acc. to EN ISO 898-1, zinc coated with organic topcoat	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A14

Table A15: Dimensions and material of Hilti MT-FL and MT-FL OC channel connectors

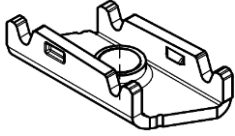
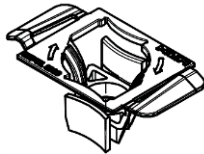
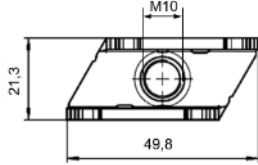
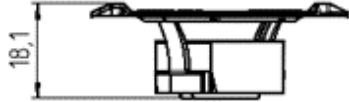

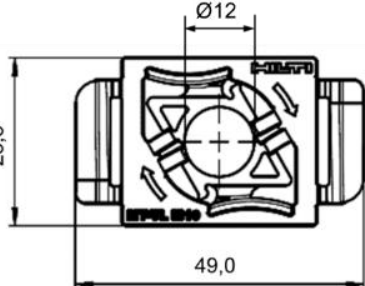
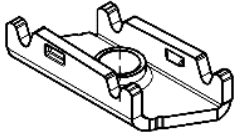
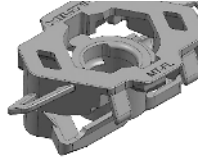
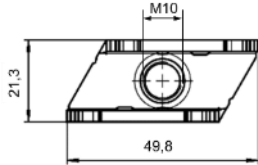


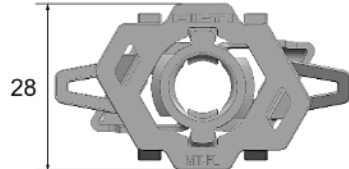
Item number	Designation	Materials and coatings	Illustration (Dimensions in mm)
2399683	MT-FL	Steel part: S460MC acc. to EN10149-2 or equivalent as defined in HN709 zinc coated Plastic part: Polypropylene	
2399682	MT-FL OC	Steel part: S460MC acc. to EN10149-2 or equivalent as defined in HN709 zinc coated with organic topcoat Plastic part: Polypropylene	
Additional components of MT-FL and MT-FL OC			
-	MT-FL	strength class 8.8 acc. to EN ISO 898-1, zinc coated	
-	MT-FL OC	strength class 8.8 acc. to EN ISO 898-1, zinc coated with organic topcoat	
-	MT-FL	1.4310 acc. to EN 10151	
-	MT-FL OC		

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A15

Table A16: Dimensions of components of Hilti MT-TL M10, MT-TL M10 OC, MT-FL and MT-FL OC channel connectors

Item number	Designation	Illustration of nut (Dimensions in mm)	Illustration of plastic part (Dimensions in mm)
2272080 2272082	MT-TL M10 MT-TL M10 OC		
			
			
2399683 2399682	MT-FL MT-FL OC		
			
			

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A16

Table A17: Dimensions and materials of Hilti MT-30 S, MT-30, MT-30 S OC, MT-30 OC, MT-40 S, MT-40, MT-40 S OC, MT-40 OC, MT-50 S, MT-50, MT-50 S OC, MT-50 OC installation channels

Illustration (Dimensions in mm and inch)	Item number	Designation	Length [m]	Materials and coatings
	2268497	MT-30 S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2268498	MT-30	6	
	2268499	MT-30 S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
	2268500	MT-30 OC	6	
	2268505	MT-40 S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2268506	MT-40	6	
	2268507	MT-40 S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
	2268508	MT-40 OC	6	
	2268509	MT-50 S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2268510	MT-50	6	
	2268511	MT-50 S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
	2268512	MT-50 OC	6	
	2362808	MT-50 U	6	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A17

Table A18: Dimensions and materials of Hilti MT-60 S, MT-60, MT-60 S OC, MT-60 OC, MT-40 D S, MT-40, MT-40 S OC, MT-40 OC installation channels

Illustration (Dimensions in mm and inch)	Item number	Designation	Length [m]	Materials and coatings
	2268513	MT-60 S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2268514	MT-60	6	
	2268515	MT-60 S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
	2268516	MT-60 OC	6	
<p>Two profiles of MT-40 channel are connected in the area of the holes in the back of the channels in a shape-fitting and force-fitting way as a kind of riveted connection.</p>	2268517	MT-40D S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2268518	MT-40D	6	
	2268519	MT-40D S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
<p>Option 1</p> <p>Option 2</p>	2362800	MT-60D	6	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2362802	MT-60D S	3	
	2362801	MT-60D OC	6	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A18

Table A19: Dimensions and materials of Hilti 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 and MT-100 OC installation channels

Illustration (Dimensions in mm and inch)	Item number	Designation	Length [m]	Materials and coatings
	2268364	MT-70 S OC	3	S350GD+ ZM310-A-C acc. to EN 10346
	2268365	MT-70 OC	6	
	2268366	MT-80 S OC	3	S350GD+ ZM310-A-C acc. to EN 10346
	2268367	MT-80 OC	6	
	2268368	MT-90 S OC	3	S350GD+ ZM310-A-C acc. to EN 10346
	2268369	MT-90 OC	6	
	2268490	MT-100 S OC	3	S350GD+ ZM310-A-C acc. to EN 10346
	2268491	MT-100 OC	6	

Hilti angle connectors of MT system

Product description
 Dimensions and materials

Annex A19

Specifications 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 .
- 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 described in Annex A17 to A19 and in combination with HILTI channel connectors MT system Annex A14 to A16.
- The MT installation open profile channels and closed profiles (girders) can be cut along the entire length following the manufacturers instructions without compromising the declared performances.
- The installation torque of channel connectors are shown in Table B1

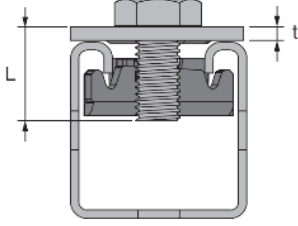
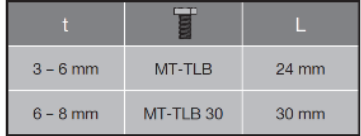
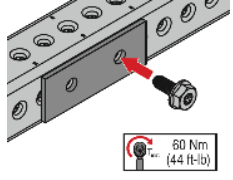
HILTI channel connectors	Bolts	Torque	Illustration
MT-TL M10	MT-TLB MT-TLB 30	30 Nm	
MT-FL	n.a.		
MT-TL M10 OC	MT-TLB OC MT-TLB 30 OC	40 Nm	
MT-FL OC	n.a.		
MT-TFB OC	n.a.	60 Nm	

Table B1: Installation torque of MT channel connectors

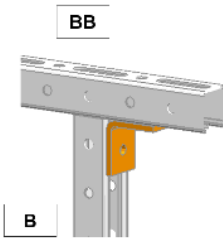
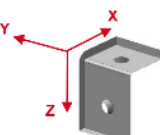
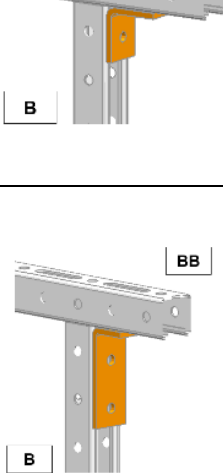
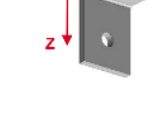
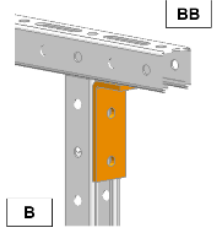
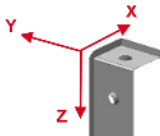
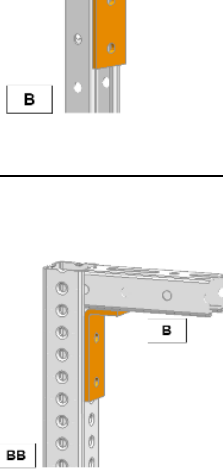
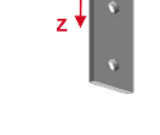
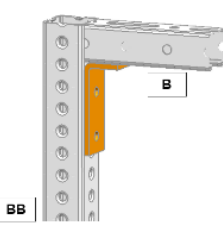
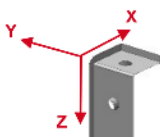
- The required torque may be applied with electrical or non-electrical devices.
- The MT installation open profile channels and closed profiles (girders) can be cut along the entire length following the manufacturers' instructions without compromising the declared performances.
- For closed MT channels (girders) the distance between the cut of the girder and start of the dome shaped hole must be at a minimum distance of 10 mm.
- Prior to installation, it must be ensured that the supported component, the anchoring of the threaded rod to the base material and the base material itself are suitable to withstand the resistance values of the installation system and that they have a fireproof certificate. The angle connectors must be installed by appropriately qualified personnel and under the supervision of the site manager. The general installation instructions of the manufacturer apply

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B1

Table B2: System specific configuration and loading directions of MT angle connectors

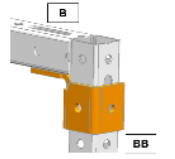
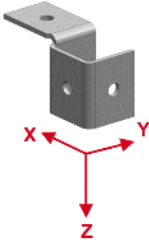
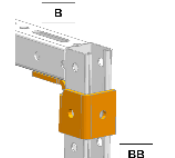
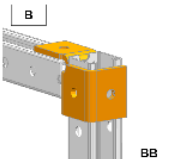
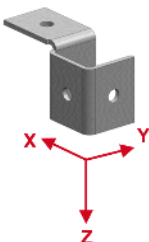
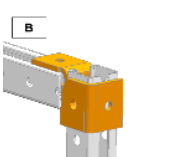
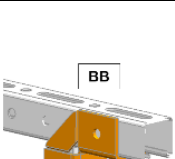
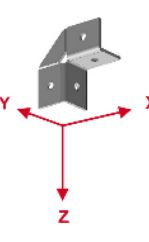
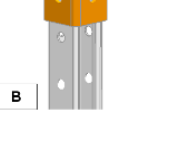
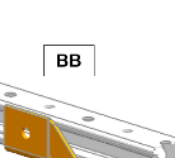
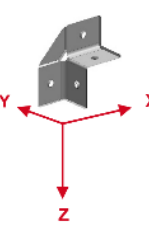
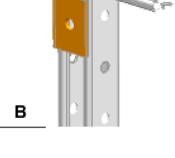
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
1		1x MT-C-L1 1x MT-C-Q1 FL		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	2 x MT-TL M10 or 2 x MT FL
2		1x MT-C-L1 OC 1x MT-C-Q1 FL 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 or 2 x MT-FL OC
3		1x MT-C-L2 1x MT-C-L2E FL		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 or 3 x MT-FL
4		1x MT-C-L2 OC 1x MT-C-L2E FL 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 or 3 x MT-FL 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

Intended use
Specifications

Annex B2

Table B2, continued: System specific configuration and loading directions of MT angle connectors

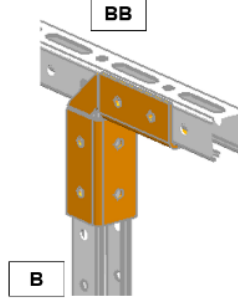
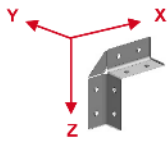
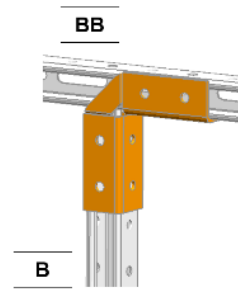
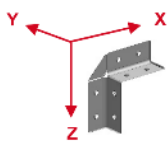
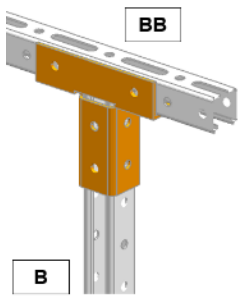
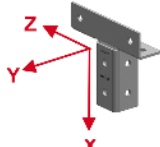
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
6		1x MT-C-T/1		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	2 x MT-TL M10
					
7		1x MT-C-T/1 OC		Channel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

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B3

Table B2, continued: System specific configuration and loading directions of MT angle connectors

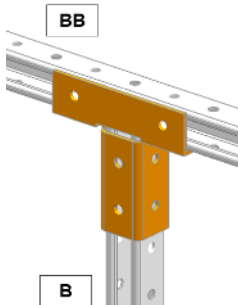
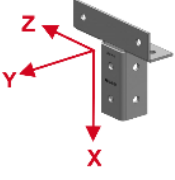
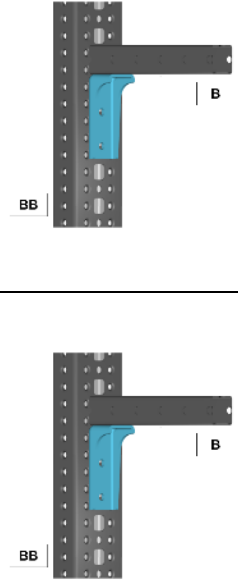

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
10		1x MT-C-LL2 or 1x MT-C-LL2 FL		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10 or 4 x MT-FL
		1x MT-C-LL2 OC or 1x MT-C-LL2 FL 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 or 4 x MT-FL OC
11		1x MT-C-LL2 or 1x MT-C-LL2 FL		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 or 4 x MT-FL
		1x MT-C-LL2 OC or 1x MT-C-LL2 FL 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 or 4 x MT-FL 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

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B4

Table B2, continued: System specific configuration and loading directions of MT angle connectors

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
13		1x MT-C-T/2 or 1x MT-C-T/2 FL		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 or 4 x MT-FL
		1x MT-C-T/2 OC or 1x MT-C-T/2 FL 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 or 4 x MT-FL 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, 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, 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

Intended use
 Specifications

Annex B5

Table B2, continued: System specific configuration and loading directions of MT angle connectors

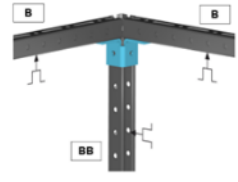
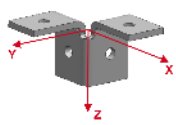
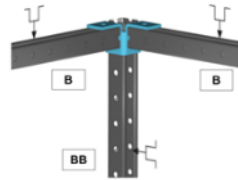
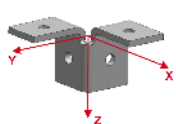
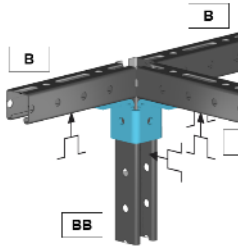
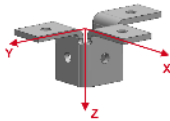
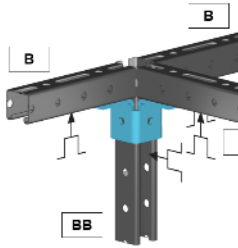
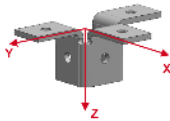
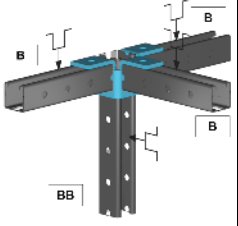
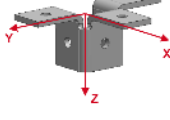
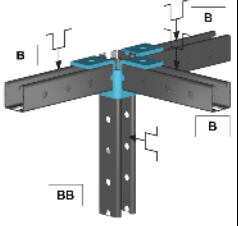
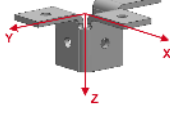
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
15		1x MT-C-T 3D/2		Channel B: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	3 x MT-TL M10
16		1x MT-C-T 3D/2 OC		Channel BB : MT-40 S, MT-40, MT-50 S, MT-50	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
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	3 x MT-TL M10
18		1x MT-C-T 3D/2 OC		Channel BB: MT-40 S, MT-40, MT-50 S, MT-50	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
	Hilti angle connectors of MT system				Annex B6
	Intended use Specifications				

Table B2, continued: System specific configuration and loading directions of MT angle connectors

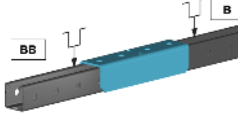
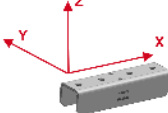
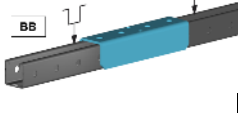
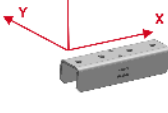
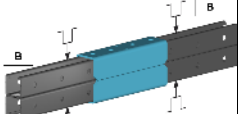
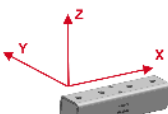
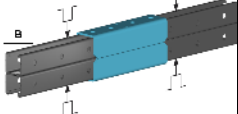
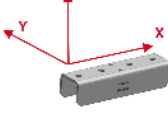
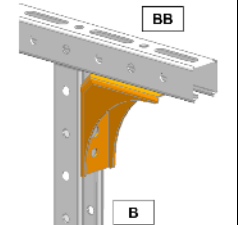

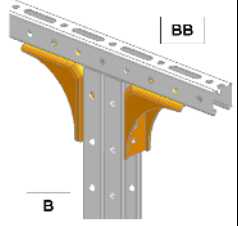
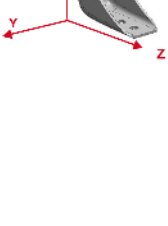
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
19		1x MT-C-T 3D/3		Channel B: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10
20		1x MT-C-T 3D/3 OC		Channel B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

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B7

Table B2, continued: System specific configuration and loading directions of MT angle connectors

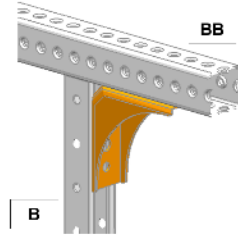
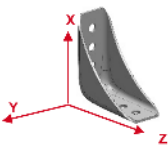
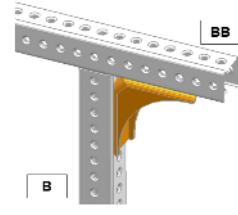
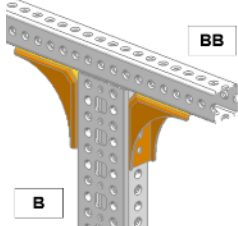
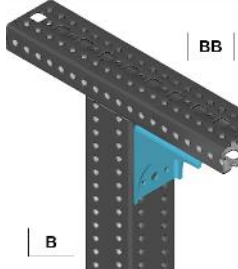
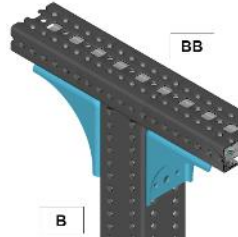
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
23		1 x MT-ES-40 or 1x MT-ES-40 FL		Channel B and BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10 or 4 x MT-FL
24		1 x MT-ES-40 OC or 1x MT-ES-40 FL 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 or 4 x MT-FL 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	8 x MT-TL M10 OC

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B8

Table B2, continued: System specific configuration and loading directions of MT angle connectors

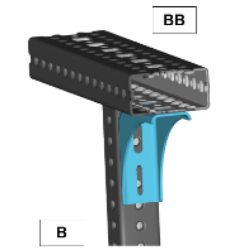

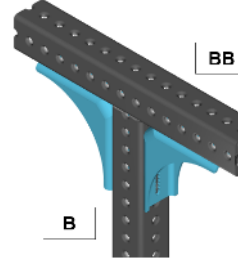
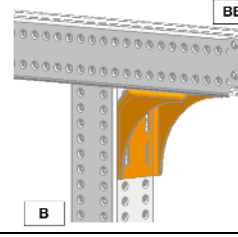
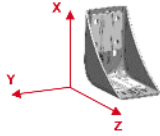
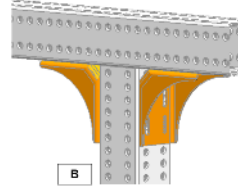
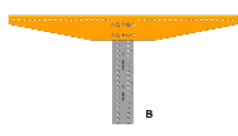
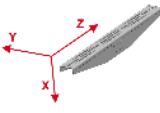
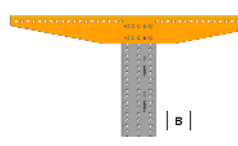
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
29		1 x MT-C-GS OC		Channel B: MT-30 S OC, MT-30 OC, MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC, MT-60 S OC, MT-60 OC, MT-40D S OC, MT-40D OC	2 x MT-TL M10 OC 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

Intended use
 Specifications

Annex B9

Table B2, continued: System specific configuration and loading directions of MT angle connectors

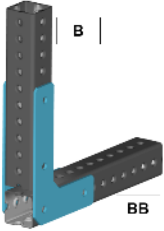
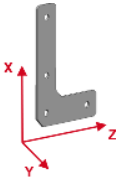
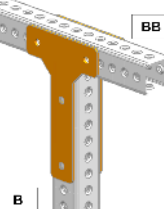
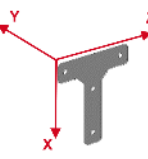
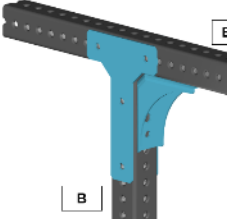
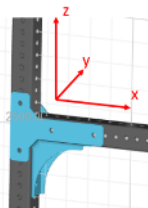
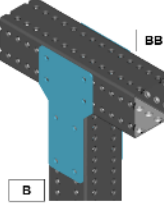
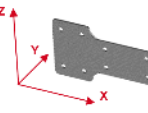
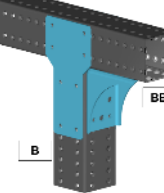
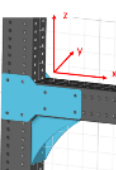
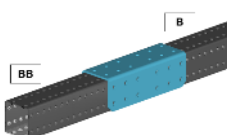
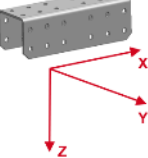
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
34		1 x MT-C-GS A OC		Channel B: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC Channel BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	4 x MT-TFB 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
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

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B10

Table B2, continued: System specific configuration and loading directions of MT angle connectors

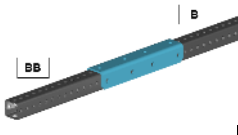
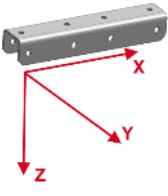
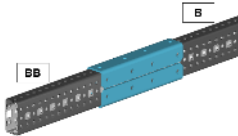

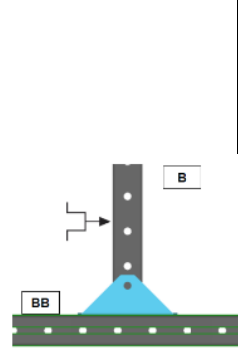
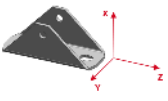
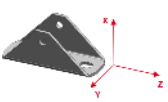
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
40		2x MT-C-GSP L OC		Channel B and BB: MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	8 x MT-TFB OC
41		2 x MT-C-GSP T OC		Channel B and BB: MT-70 S OC, MT-70 OC 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
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

Hilti angle connectors of MT system

Intended use
Specifications

Annex B11

Table B2, continued: System specific configuration and loading directions of MT angle connectors

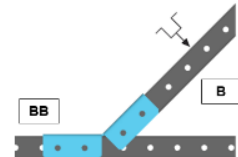
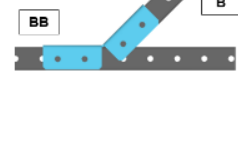
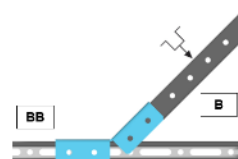
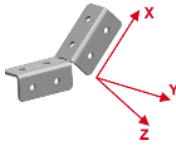
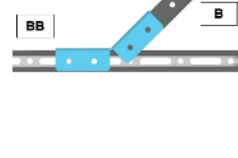
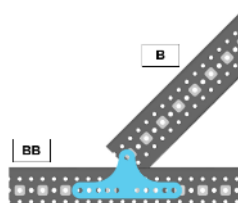
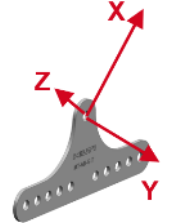
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
46		1 x MT-ES-70 OC		Channel B and BB: MT-70 S OC, MT-70 OC	12 x MT-TFB OC
47		2 x MT-ES-70 OC		Channel B and BB: MT-80 S OC, MT-80 OC	24 x MT-TFB OC
48		1x MT-AB 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-TL M10
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-TL M10 OC

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B12

Table B2, continued: System specific configuration and loading directions of MT angle connectors

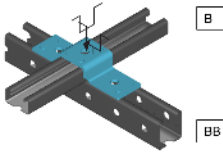
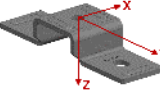
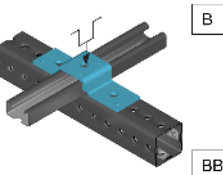
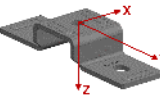
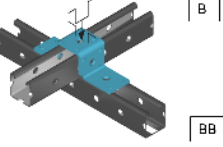
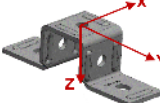
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
50		1x MT-AB-LL2 45		Channel B: MT-40 S, MT-40, MT-50 S, MT-50 Channel BB: MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	4 x MT-TL M10
51		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

Intended use
 Specifications

Annex B13

Table B2, continued: System specific configuration and loading directions of MT angle connectors

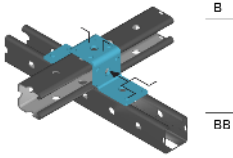
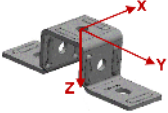
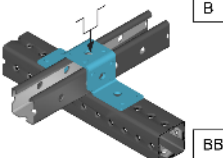
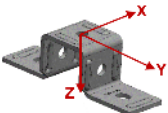
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
55		1x MT-CC-30		Channel B: MT-30 S, MT-30	3 x MT-TL M10
				Channel BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	
56		1x MT-CC-30		Channel B: MT-30 S, MT-30	1 x MT-TL M10 2 x MT-TFB OC
				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	
57		1x MT-CC-40/50 or 1x MT-CC-40/50 FL		Channel B: MT-40 S, MT-40, MT-50 S, MT-50	3 x MT-TL M10 or 3 x MT-FL
		1x MT-CC-40/50 OC or 1x MT-CC-40/50 FL OC		Channel B: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B14

Table B2, continued: System specific configuration and loading directions of MT angle connectors

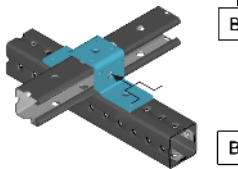
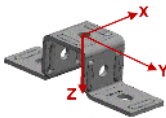
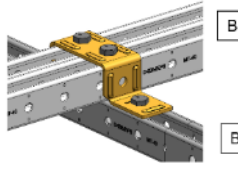
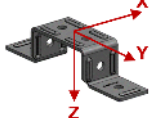
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
58		1x MT-CC-40/50		Channel B: MT-40 S, MT-40, MT-50 S, MT-50	3 x MT-TL M10
		1x MT-CC-40/50 OC		Channel BB: MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	
59		MT-CC-40/50		Channel B: MT-40 S, MT-40, MT-50 S, MT-50	1 x MT-TL M10 2 x MT-TFB OC
		MT-CC-40/50 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	
				Channel B: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	1 x MT-TL M10 OC 2 x MT-TFB 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	

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B15

Table B2, continued: System specific configuration and loading directions of MT angle connectors

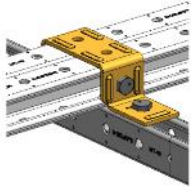
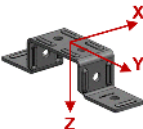
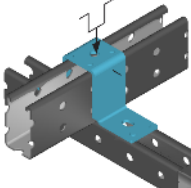
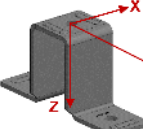
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
60		1x MT-CC-40/50		Channel B: MT-40 S, MT-40, MT-50 S, MT-50	1 x MT-TL M10 2 x MT-TFB OC
		1x MT-CC-40/50 OC		Channel B: MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	
61		1x MT-CC-40/50X2		Channel B (2x): MT-40 S, MT-40, MT-50 S, MT-50	4 x MT-TL M10
		1x MT-CC-40/50X2 OC		Channel B (2x): MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	
				Channel B (2x): MT-40 S OC, MT-40 OC, MT-50 S OC, MT-50 OC,	4 x MT-TL M10 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	

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B16

Table B2, continued: System specific configuration and loading directions of MT angle connectors

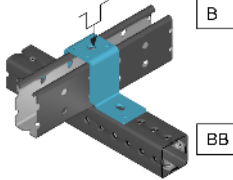
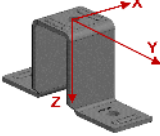
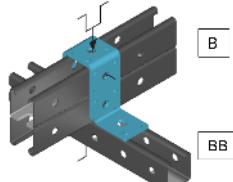
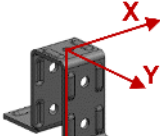
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
62		1x MT-CC-40/50X2		Channel B: MT-40D S, MT-40D	4 x MT-TL M10
		1x MT-CC-40/50X2 OC		Channel B: MT-40D S OC, MT-40D OC	
63		1x MT-CC-60		Channel B: MT-60 S, MT-60	3 x MT-TL M10
		1x MT-CC-60 OC		Channel B: MT-60 S OC, MT-60 OC,	

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B17

Table B2, continued: System specific configuration and loading directions of MT angle connectors

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
64		1x MT-CC-60		Channel B: MT-60 S, MT-60	1 x MT-TL M10 2 x MT-TFB OC
		1x MT-CC-60 OC		Channel B: MT-60 S OC, MT-60 OC	
65		1x MT-CC-40D		Channel B: MT-40D S, MT-40D	3 x MT-TL M10
		1x MT-CC-40D OC		Channel B: MT-40D S OC, MT-40D OC	
				Channel B: MT-40D S OC, MT-40D OC	3 x MT-TL M10 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	

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B18

Table B2, continued: System specific configuration and loading directions of MT angle connectors

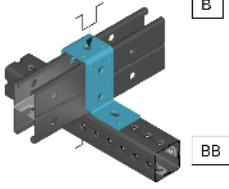
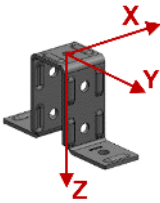
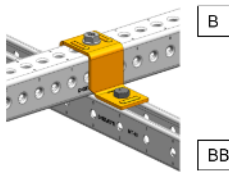
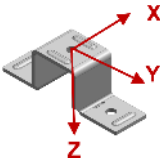
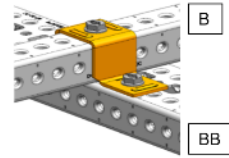
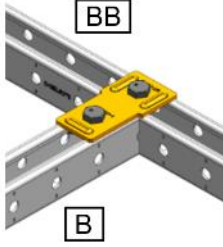
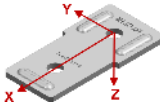
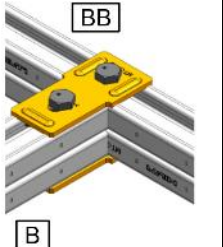
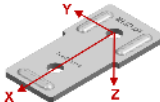
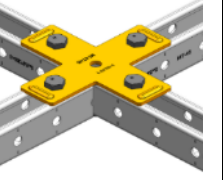
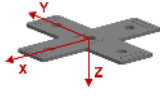
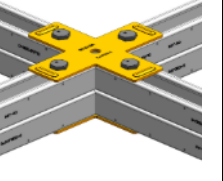
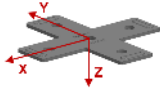
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
66		1x MT-CC-40D		Channel B: MT-40D S, MT-40D	1 x MT-TL M10 2 x MT-TFB OC
		1x MT-CC-40D OC		Channel B: MT-40D S OC, MT-40D OC	
67		1x MT-CC-70 OC		Channel B : MT-70 S OC, MT-70 OC	2 x MT-TL M10 1 x MT-TFB OC
		1x MT-CC-70 OC		Channel B : MT-70 S OC, MT-70 OC	
68		1x MT-CC-70 OC		Channel B : MT-70 S OC, MT-70 OC	3 x MT-TFB OC
Hilti angle connectors of MT system					Annex B19
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Table B2, continued: System specific configuration and loading directions of MT angle connectors

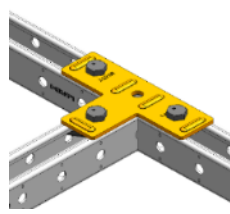
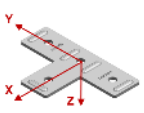
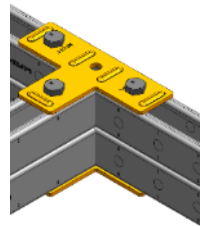
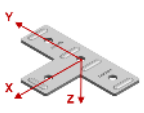

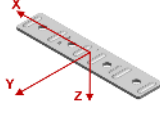

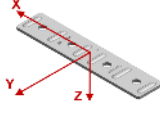
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
69		1x MT-CT-H2		Channel B or BB: MT-30 S, MT-30, MT-40 S, MT-40, MT-50 S, MT-50, MT-60 S, MT-60, MT-40D S, MT-40D	2 x MT-TL M10
		1x MT-CT-H2 OC		Channel B or 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
70		2x MT-CT-H2		Channel B or BB: MT-40D S, MT-40D	4 x MT-TL M10
		2x MT-CT-H2 OC		Channel B or BB: MT-40D S OC, MT-40D OC	4 x MT-TL M10 OC
71		1x MT-CT-H5		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-CT-H5 OC		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
72		2x MT-CT-H5		MT-40D S, MT-40D	8 x MT-TL M10
		2x MT-CT-H5 OC		MT-40D S OC, MT-40D OC	8 x MT-TL M10 OC

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B20

Table B2, continued: System specific configuration and loading directions of MT angle connectors

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
73		1x MT-CT-T		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
		MT-CT-T OC		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
74		2x MT-CT-T		MT-40D S, MT-40D	6 x MT-TL M10
		2x MT-CT-T OC		MT-40D S OC, MT-40D OC	6 x MT-TL M10 OC
75		1x MT-CT-H4		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-CT-H4 OC		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
76		2x MT-CT-H4		MT-40D S, MT-40D	8 x MT-TL M10
		2x MT-CT-H4 OC		MT-40D S OC, MT-40D OC	8 x MT-TL M10 OC

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B21

Table B2, continued: System specific configuration and loading directions of MT angle connectors


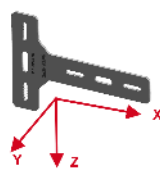

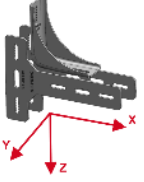

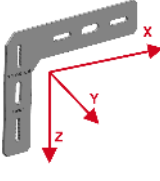
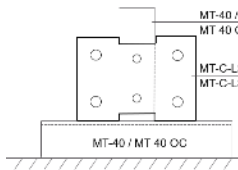
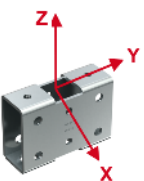
No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
77		1x MT-ES-60		MT-60 S, MT-60	4 x MT-TL M10
		1x MT-ES-60 OC		MT-60 S OC, MT-60 OC	4 x MT-TL M10 OC
78		1x MT-C-GLP X A OC		Channel BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC Channel B: MT-80 S OC, MT-80 OC	8 x MT-TFB OC
79		1x MT-C-GLP X A OC		Channel BB: MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC Channel B: MT-90 S OC, MT-90 OC	8 x MT-TFB OC
80		2x MT-C-GLP T A OC		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
81		2 x MT-C-GLP T A OC 1 x MT-C-GL A OC		MT-80 S OC, MT-80 OC MT-90 S OC, MT-90 OC MT-100 S OC, MT-100 OC	24 x MT-TFB OC

Hilti angle connectors of MT system

Intended use
 Specifications

Annex B22

Table B2, continued: System specific configuration and loading directions of MT angle connectors

No	System configuration	HILTI angle connector	Static action directions	HILTI installation channels	Number and type of HILTI channel connectors
82		2x MT-C-GSP T A OC		MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	8 x MT-TFB OC
83		2x MT-C-GSP T A OC 1x MT-C-GS A OC		MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	12 x MT-TFB OC
84		2x MT-C-GSP L A OC		MT-70 S OC, MT-70 OC MT-80 S OC, MT-80 OC	8 x MT-TFB OC
85		1x MT-C-LS		MT-40 S, MT-40	4 x MT-TL M10
		1x MT-C-LS OC		MT-40 S OC, MT-40 OC	4 x MT-TL M10 OC

Hilti angle connectors of MT system

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 Specifications

Annex B23

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

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
9.91	10.25	NPA ¹⁾	NPA ¹⁾	10.25	9.91	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C2: Characteristic resistance of the angle connectors MT-C-Q1 FL and MT-C-Q1 FL OC in combination with installation channels and channel connectors acc. to Table B2, no. 1 and no. 2

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
6.81	7.62	NPA ¹⁾	NPA ¹⁾	6.81	7.62	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C3: Characteristic resistance of the angle connectors MT-C-L2 and MT-C-L2 OC in combination with installation channels and channel connectors acc. to Table B2, no. 3, 4, 5

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
3.60	4.88	0.75	0.75	15.66	11.45	0.058	NPA ¹⁾	NPA ¹⁾

Table C4: Characteristic resistance of the angle connectors MT-C-L2E FL and MT-C-L2E FL OC in combination with installation channels and channel connectors acc. to Table B2, no. 3, 4, 5

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	10.52	8.63	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C5: Characteristic resistance of the angle connectors MT-C-T/1 and MT-C-T/1 OC in combination with installation channels and channel connectors acc. to Table B2, no. 6

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
8.47	9.94	0.76	0.76	6.07	4.77	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C6: Characteristic resistance of the angle connectors MT-C-T/1 and MT-C-T/1 OC in combination with installation channels and channel connectors acc. to Table B2, no. 7

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
7.09	9.43	1.44	1.44	4.35	6.03	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Hilti angle connectors of MT system

Characteristic performance

Annex C1

Table C7: Characteristic resistance of the angle connectors MT-C-LL1, MT-C-LL1 OC, MT-C-LL1 FL and MT-C-LL1 FL OC in combination with installation channels and channel connectors acc. to Table B2, no. 8

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
8.55	7.18	0.57	0.57	8.55	7.18	0.0334	0.1925	0.0344

Table C8: Characteristic resistance of the angle connectors MT-C-LL1 and MT-C-LL1 OC in combination with installation channels and channel connectors acc. to Table B2, no. 9

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
6.49	5.14	0.24	0.24	6.49	5.14	0.0313	NPA ¹⁾	0.0313

Table C9: Characteristic resistance of the angle connectors MT-C-LL2, MT-C-LL2 OC, MT-C-LL2 FL and MT-C-LL2 FL OC in combination with installation channels and channel connectors acc. to Table B2, no. 10

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
7.50	7.0	0.82	0.82	7.50	7.0	0.0311	0.2452	0.0311

Table C10: Characteristic resistance of the angle connectors MT-C-LL2 and MT-C-LL2 OC in combination with installation channels and channel connectors acc. to Table B2, no. 11

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
7.38	8.22	0.61	0.61	7.38	8.22	0.0311	0.0548	0.0311

Table C11: Characteristic resistance of the angle connectors MT-C-T/2 and MT-C-T/2 OC in combination with installation channels and channel connectors acc. to Table B2, no. 12

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
13.6	11.28	1.48	1.48	3.57	3.57	0.0881	0.0938	0.0375

Table C12: Characteristic resistance of the angle connectors MT-C-T/2, MT-C-T/2 OC, MT-C-T/2 FL and MT-C-T/2 FL OC in combination with installation channels and channel connectors acc. to Table B2, no. 13

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
13.14	8.96	0.92	0.92	9.82	9.82	0.0780	0.0938	0.0318

Table C13: Characteristic resistance of the angle connectors MT-C-T A and MT-C-T A OC in combination with installation channels and channel connectors acc. to Table B2, no. 14

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
22.9	11.93	26.93	26.93	3.68	3.68	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Hilti angle connectors of MT system

Characteristic performance

Annex C2

Table C14: Characteristic resistance of the angle connectors MT-C-T 3D/2 and MT-C-T 3D/2 OC in combination with installation channels and channel connectors acc. to Table B2, no. 15 and no. 16

+ F _{x, Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
3.79	5.69	1.21	1.21	6.52	3.68	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C15: Characteristic resistance of the angle connectors MT-C-T 3D/2 and MT-C-T 3D/2 OC in combination with installation channels and channel connectors acc. to Table B2, no. 17 and no. 18

+ F _{x, Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
3.38	5.69	2.42	2.29	4.24	5.86	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C16: Characteristic resistance of the angle connectors MT-C-T 3D/3 and MT-C-T 3D/3 OC in combination with installation channels and channel connectors acc. to Table B2, no. 19 and no. 20

+ F _{x, Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
5.6	5.0	1.1	1.1	6.3	3.2	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C17: Characteristic resistance of the angle connectors MT-C-T 3D/3 and MT-C-T 3D/3 OC in combination with installation channels and channel connectors acc. to Table B2, no. 21 and no. 22

+ F _{x, Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
5.80	5.50	2.08	2.08	3.2	6.3	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C18: Characteristic resistance of the angle connectors MT-ES-40, MT-ES-40 FL, MT-ES-40 OC and MT-ES-40 FL OC in combination with installation channels and channel connectors acc. to Table B2, no. 23 and no. 24

+ F _{x, Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
14.0	14.0	0.78	0.78	14.0	14.0	0.0158	0.6367	0.0625

Table C19: Characteristic resistance of the angle connectors MT-ES-40, MT-ES-40 FL, MT-ES-40 OC and MT-ES-40 FL OC in combination with installation channels and channel connectors acc. to Table B2, no. 25 and no. 26

+ F _{x, Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
28.0	28.0	1.56	1.56	28.0	28.0	0.0315	0.8082	0.125

Hilti angle connectors of MT system

Characteristic performance

Annex C3

Table C20: Characteristic resistance of the angle connectors MT-C-GS OC in combination with installation channels and channel connectors acc. to Table B2, no. 27

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
8.81	13.62	1.11	1.11	7.05	7.27	0.08	0.52	0.41	0.11

Table C21: Characteristic resistance of the angle connectors MT-C-GS OC in combination with installation channels and channel connectors acc. to Table B2, no. 28

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
20.52	17.85	1.89	1.89	15.85	15.85	0.343	1.612	0.189

Table C22: Characteristic resistance of the angle connector MT-C-GS OC in combination with installation channels and channel connectors acc. to Table B2, no. 29

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
9.19	15.37	2.29	2.29	7.27	7.97	0.098	0.517	0.393	0.102

Table C23: Characteristic resistance of the angle connector MT-C-GS OC in combination with installation channels and channel connectors acc. to Table B2, no. 30

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
10.41	8.03	4.05	4.0	18.38	11.70	0.15	0.54	0.38	0.12

Table C24: Characteristic resistance of the angle connectors MT-C-GS OC in combination with installation channels and channel connectors acc. to Table B2, no. 31

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
30.99	58.75	11.65	11.65	45.47	45.47	1.17	2.43	0.41

Table C25: Characteristic resistance of the angle connector MT-C-GL OC in combination with installation channels and channel connectors acc. to Table B2, no. 32

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
27.25	44.78	19.38	19.38	24.14	22.24	0.70	1.16	1.09	1.09

Table C26: Characteristic resistance of the angle connectors MT-C-GL OC in combination with installation channels and channel connectors acc. to Table B2, no. 33

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
54.53	103.9	38.86	38.36	41.75	41.75	2.62	2.99	2.19

Hilti angle connectors of MT system

Characteristic performance

Annex C4

Table C27: Characteristic resistance of the angle connector MT-C-GS A OC in combination with installation channels and channel connectors acc. to Table B2, no. 34

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
10.44	8.04	4.01	4.03	18.39	11.69	0.17	0.48	0.39	0.14

Table C28: Characteristic resistance of the angle connectors MT-C-GS A OC in combination with installation channels and channel connectors acc. to Table B2, no. 35

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
27.76	58.77	11.81	11.81	45.47	45.47	1.07	2.43	0.44

Table C29: Characteristic resistance of the angle connector MT-C-GL A OC in combination with installation channels and channel connectors acc. Table B2, no. 36

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
27.6	44.5	19.47	19.47	24.9	22.3	0.72	1.12	1.02	0.85

Table C30: Characteristic resistance of the angle connector MT-C-GL A OC in combination with installation channels and channel connectors acc. to Table B2, no. 37

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
54.64	103.69	39.19	39.19	41.73	41.32	2.62	2.99	2.44

Table C31: Characteristic resistance of the angle connector MT-U-GL1 OC in combination with installation channels and channel connectors acc. Table B2, no. 38

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
113.5	NPA	11.16	11.16	85.53	85.53	16.51	4.92	NPA ¹⁾

Table C32: Characteristic resistance of the angle connector MT-U-GL1 OC in combination with installation channels and channel connectors acc. to Table B2, no. 39

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
142.76	NPA	24.62	24.62	141.25	141.25	18.83	7.23	NPA ¹⁾

Table C33: Characteristic resistance of the angle connectors MT-C-GSP L OC in combination with installation channels and channel connectors acc. Table B2, no. 40

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
22.58	23.0	5.84	5.84	17.98	18.35	0.52	1.30	1.27	0.69

Hilti angle connectors of MT system

Characteristic performance

Annex C5

Table C34: Characteristic resistance of the angle connectors MT-C-GSP T OC in combination with installation channels and channel connectors acc. to Table B2, no. 41

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
80.72	81.49	9.68	9.68	11.71	11.71	0.43	1.37	0.63

Table C35: Characteristic resistance of the angle connectors MT-C-GSP T OC and MT-C-GS OC in combination with installation channels and channel connectors acc. to Table B2, no. 42

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
71.2	70.1	12.3	12.3	23.6	25.3	0.85	2.2	2.05	1.21

Table C36: Characteristic resistance of the angle connectors MT-C-GLP T OC in combination with installation channels and channel connectors acc. to Table B2, no. 43

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
142.95	143.06	13.92	13.92	41.2	41.2	1.41	5.40	1.81

Table C37: Characteristic resistance of the angle connectors MT-C-GLP T OC and MT-C-GL OC in combination with installation channels and channel connectors acc. to Table B2, no. 44

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	+M _{y,Rk} [kNm]	-M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
115.6	145.86	30.1	30.1	73.4	75.05	3.58	6.42	6.46	5.67

Table C38: Characteristic resistance of the angle connector MT-ES-90 OC in combination with installation channels and channel connectors acc. to Table B2, no. 45

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
73.07	75.26	7.76	7.76	7.85	8.32	3.50	5.23	2.58

Table C39: Characteristic resistance of the angle connector MT-ES-70 OC in combination with installation channels and channel connectors acc. to Table B2, no. 46

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
44.91	44.61	3.84	3.84	2.77	2.76	0.67	2.73	1.64

Table C40: Characteristic resistance of the angle connectors MT-ES-70 OC in combination with installation channels and channel connectors acc. Table B2, no. 47

+ F _{x,Rk} [kN]	- F _{x,Rk} [kN]	+ F _{y,Rk} [kN]	- F _{y,Rk} [kN]	+ F _{z,Rk} [kN]	- F _{z,Rk} [kN]	M _{x,Rk} [kNm]	M _{y,Rk} [kNm]	M _{z,Rk} [kNm]
97.12	101.16	5.71	5.71	9.9	9.9	2.07	4.91	2.48

Hilti angle connectors of MT system

Characteristic performance

Annex C6

Table C41: Characteristic resistance of the angle connectors MT-AB A and MT-AB A OC in combination with installation channels and channel connectors acc. to Table B2, no. 48 and no. 49

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
18.06	18.06	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾

Table C42: Characteristic resistance of the angle connectors MT-AB-LL2 45 and MT-AB-LL2 45 OC in combination with installation channels and channel connectors acc. to Table B2, no. 50, no. 51, no. 52 and no. 53

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
10.98	11.50	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾

Table C43: Characteristic resistance of the angle connectors MT-AB-G T OC in combination with installation channels and channel connectors acc. to Table B2, no. 54

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
35.24	36.29	NPA ⁽¹⁾	NPA ⁽¹⁾	7.08	7.08	1.83	NPA ⁽¹⁾	NPA ⁽¹⁾

Table C44: Characteristic resistance of the angle connector MT-CC-30 in combination with channels and channel connectors acc. to Table B2, no. 55, 56

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
9.48	9.48	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾

Table C45: Characteristic resistance of the angle connectors MT-CC-40/50, MT-CC-40/50 OC, MT-CC-40/50 FL and MT-CC-40/50 FL OC in combination with channels and channel connectors acc. to Table B2, no. 57

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
15.21	15.21	16.00	16.00	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾

Table C46: Characteristic resistance of the angle connectors MT-CC-40/50 and MT-CC-40/50 OC, in combination with channels and channel connectors acc. to Table B2, no. 58, 59, 60

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
15.21	15.21	16.00	16.00	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾

Table C47: Characteristic resistance of the angle connectors MT-CC-40/50X2 MT-CC-40/50X2 OC in combination with channels and channel connectors acc. to Table B2, no. 61, 62

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
13.81	13.81	10.57	10.57	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾	NPA ⁽¹⁾

Hilti angle connectors of MT system

Characteristic performance

Annex C7

Table C48: Characteristic resistance of the angle connectors MT-CC-60 and MT-CC-60 OC in combination with channels and channel connectors acc. to Table B2, no. 63 and Annex B17, Table B2, no. 64

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
14.98	14.98	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C49: Characteristic resistance of the angle connectors MT-CC-40D and MT-CC-40D OC in combination with channels and channel connectors acc. to Table B2, no. 65, 66

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
10.77	10.77	18.67	18.67	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C50: Characteristic resistance of the angle connector MT-CC-70 OC in combination with channels and channel connectors acc. to Table B2, no. 67, 68

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
14.81	14.81	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C51: Characteristic resistance of the angle connectors MT-CT-H2 and MT-CT-H2 OC in combination with channels and channel connectors acc. to Table B2, no. 69

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
7.59	7.59	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C52: Characteristic resistance of the angle connectors MT-CT-H2 and MT-CT-H2 OC in combination with channels and channel connectors acc. to Table B2, no. 70

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
12.67	12.67	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C53: Characteristic resistance of the angle connectors MT-CT-H5 and MT-CT-H5 OC in combination with channels and channel connectors acc. to Table B2, no. 71

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
10.37	10.37	3.89	3.89	3.66	3.66	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C54: Characteristic resistance of the angle connectors MT-CT-H5 and MT-CT-H5 OC in combination with channels and channel connectors acc. to Table B2, no. 72

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
18.38	18.38	13.6	13.6	15.38	15.38	NPA ¹⁾	0.607	NPA ¹⁾

Hilti angle connectors of MT system

Characteristic performance

Annex C8

Table C55: Characteristic resistance of the angle connectors MT-CT-T and MT-CT-T OC in combination with channels and channel connectors acc. to Table B2, no. 73

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [Nkm]
10.37	10.37	3.9	3.9	3.66	3.66	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C56: Characteristic resistance of the angle connectors MT-CT-T and MT-CT-T OC in combination with channels and channel connectors acc. to Table B2, no. 74

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [Nm]	M _{y, Rk} [Nm]	M _{z, Rk} [kNm]
18.38	18.38	13.6	13.6	15.38	15.38	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C57: Characteristic resistance of the angle connectors MT-CT-H4 and MT-CT-H4 OC in combination with channels and channel connectors acc. to Table B2, no. 75

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [Nm]	M _{y, Rk} [Nm]	M _{z, Rk} [Nm]
11.21	11.21	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C58: Characteristic resistance of the angle connectors MT-CT-H4 and MT-CT-H4 OC in combination with channels and channel connectors acc. to Table B2, no. 76

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [Nm]	M _{y, Rk} [Nm]	M _{z, Rk} [Nm]
21.24	21.24	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Table C59: Characteristic resistance of the angle connectors MT-ES-60 and MT-ES-60 OC in combination with channels and channel connectors acc. to Table B2, no. 77

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
19.21	5.29	1.81	1,81	7.20	6.82	0.26	1.14	0.268

Table C60: Characteristic resistance of the angle connector MT-C-GLP X A OC in combination with channels and channel connectors acc. to Table B2, no. 78

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	+M _{z, Rk} [kNm]	-M _{z, Rk} [kNm]
41.34	12.89	6.07	24.88	21.01	21.01	0.48	4.57	0.53	0.68

Table C61: Characteristic resistance of the angle connector MT-C-GLP X A OC in combination with channels and channel connectors acc. to Table B2, no. 79

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	+M _{z, Rk} [kNm]	-M _{z, Rk} [kNm]
16.85	7.66	7.22	50.28	9.35	9.35	0.50	4.72	0.54	0.71

Hilti angle connectors of MT system

Characteristic performance

Annex C9

Table C62: Characteristic resistance of the angle connectors MT-C-GLP T A OC and MT-C-GL A OC in combination with channels and channel connectors acc. to Table B2, no. 80

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	F _{z, Rk} [kN]	M _{x, Rk} [kNm]	+M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
116.62	109.10	7.15	40.776	1.709	4.218	2.981

Table C63: Characteristic resistance of the angle connectors MT-C-GLP T A OC in combination with channels and channel connectors acc. to Table B2, no. 81

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	+ M _{y, Rk} [kNm]	- M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
126.43	124.96	25.21	25.21	61.96	90.551	3.957	7.785	6.673	5.803

Table C64: Characteristic resistance of the angle connectors MT-C-GSP T A OC in combination with channels and channel connectors acc. to Table B2, no. 82

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	+M _{y, Rk} [kNm]	-M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
66.70	55.14	3.41	3.41	29.30	27.7	0.71	1.15	1.16	1.11

Table C65: Characteristic resistance of the angle connectors MT-C-GSP T A OC and MT-C-GS A OC in combination with channels and channel connectors acc. to Table B2, no. 83

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	M _{x, Rk} [kNm]	+M _{y, Rk} [kNm]	-M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
67.65	66.54	9.70	9.70	35.97	34.22	1.17	2.72	2.15	1.61

Table C66: Characteristic resistance of the angle connectors MT-C-GSP L A OC in combination with channels and channel connectors acc. to Table B2, no. 84

+ F _{x,Rk} [kN]	- F _{x, Rk} [kN]	+ F _{y, Rk} [kN]	- F _{y, Rk} [kN]	+ F _{z, Rk} [kN]	- F _{z, Rk} [kN]	+M _{x, Rk} [kNm]	-M _{x, Rk} [kNm]	M _{y, Rk} [kNm]	M _{z, Rk} [kNm]
34.99	32.73	4.29	4.29	23.15	23.59	0.67	0.81	0.82	0.81

Hilti angle connectors of MT system

Characteristic performance

Annex C10

Table C67: Characteristic resistance of the angle connectors MT-C-LS and MT-C-LS OC in combination with channels and channel connectors acc. to Table B2, no. 85

+ F_{x, Rk} [kN]	- F_{x, Rk} [kN]	+ F_{y, Rk} [kN]	- F_{y, Rk} [kN]	+ F_{z, Rk} [kN]	- F_{z, Rk} [kN]	M_{x, Rk} [Nm]	M_{y, Rk} [Nm]	M_{z, Rk} [Nm]
NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	16.4	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾	NPA ¹⁾

Designation

F_{x,R} Resistance in direction of local x-Axis

F_{y,R} Resistance in direction of local y-Axis

F_{z,R} Resistance in direction of local z-Axis

M_{x,R} Resistance around local x-Axis

M_{y,R} Resistance around local y-Axis

M_{z,R} Resistance around local z-Axis

All characteristic resistances for ambient temperatures do not consider deflections.

Partial safety factor for design resistance is $\gamma_M = F_{Rk} / F_{Rd}$ or $\gamma_M = M_{Rk} / M_{Rd}$.

For design resistances the manufacturer's specifications and national regulations must be observed.

Hilti angle connectors of MT system

Characteristic performance

Annex C11