



European Technical Assessment

**ETA-22/0810
of 02/09/2026**

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 drilled plates MQZ-L

**Product family to which the
construction product belongs:**

Products for installation systems for supporting technical
building equipment

Manufacturer:

Hilti AG Liechtenstein
Feldkircherstraße 100
9494 Schaan
FÜRSTENTUM LIECHTENSTEIN

Manufacturing plants:

L 1005049

**This European Technical
Assessment contains:**

13 pages including 9 pages of annexes which form an
integral part of this assessment

**This European Technical
Assessment is issued in
accordance with Article 95(4)
of Regulation (EU) 2024/3110,
on the basis of:**

European Assessment Document (EAD)
280016-00-0602 version August 2017

This version replaces:

ETA-22/0810 of 16/03/2026

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Specific Parts

1 Technical description of the product

The MQZ-L11, MQZ-L11-F, MQZ-L13 and MQZ-L13-F drilled plates are steel plates that are stamped rectangularly with a centrally positioned opening, which is 11.5 mm or 13.5 mm in diameter. The plates have raised edges in the corners at the rear to ensure a perfect fit with the Hilti installation channels. Annex A describes the dimensions and materials of the MQZ-L drilled plates.

Annex A describes the dimensions and materials of the Hilti MQZ-L drilled plates.

Information on the intended use and the requirements for the performance assessment are given in Annex B.

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

The performance given in Section 3 can only be assumed if the Hilti MQZ-L11, MQZ-L11-F, MQZ-L13 and MQZ-L13-F drilled plates is used in compliance with the specifications and under boundary conditions set out in Annexes A to C. The test and assessment methods on which this European Technical Assessment is based lead to an assumption of a working life of the Hilti MQZ-L11, MQZ-L11-F, MQZ-L13 and MQZ-L13-F drilled plates of at least 50 years in final use under ambient temperatures in indoor areas. The indications given on the working life cannot be interpreted as a guarantee given by the producer, 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)

Essential characteristic	Performance
Reaction to fire	Class A1
Pull-through resistance under fire exposure	See Annex C1

3.2 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Shape	See Annex A1
Dimensions	See Annex A1
Material	See Annex A1
Characteristic pull through resistance	No performance determined

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 1996/577/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 1997/161/EC.
The system is 2+
- In case of intended use c) specified in Section 2:
Commission Decision 1999/472/EC, as amended by Commission Decision 2001/596/EC.
The system is 4
- In case of intended use d) specified in Section 2:
Commission Decision 1999/472/EC, as amended by Commission Decision 2001/596/EC.
The system is 3

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

Loïc PAYET

Responsable de la division Structure, Maçonnerie et Partition,

Figure A1: Dimensions, material and coating of MQZ-L drilled plates

Item number	Designation	D [mm]	Coating	Material	Illustration
2199455	MQZ-L11	11,5	Fe/Zn12/A acc. to ISO 20811	S235JR in accordance with DIN EN 10025-2	
304197	MQZ-L11-F		Acc. to ASTM A153M		
2199456	MQZ-L13	13,5	Fe/Zn12/A acc. to ISO 20811		
304198	MQZ-L13-F		Acc. to ASTM A153M		

Hilti drilled plates MQZ-L

Product Description
Dimensions and materials

Annex A1

Specifications of intended use

- MQZ-L11, MQZ-L11-F, MQZ-L13 and MQZ-L13-F drilled plates are used in building services engineering installation systems at ambient temperature and at elevated temperatures. MQZ-L11, MQZ-L11-F, MQZ-L13 and MQZ-L13-F drilled plates are used to transfer building services component loads such as ducts and equipment for sprinklers, wastewater, drinking water, heating, cooling, ventilation, electrical and other installations.
- MQZ-L11, MQZ-L11-F, MQZ-L13 and MQZ-L13-F described in this ETA are suitable for undertaking this load-bearing function under the conditions listed in section 2.
- The resistance and deformation in case of fire are referring to the boundary conditions of the standard temperature time curve (STTC) in accordance with EN 1363-1.
- MQZ-L11, MQZ-L11-F, MQZ-L13 and MQZ-L13-F drilled plates are used to fix threaded rods to installation channels or brackets in conjunction with hexagonal nuts.
- The installation instructions according to the manufacturers guideline are a prerequisite for the information on the performance assessment in Annex C.
- MQZ-L11 and MQZ-L11-F drilled plates are used in pairs in conjunction with M10 Hilti threaded rods in strength class ≥ 4.8 in accordance with DIN 976-1 as per Table B1; hexagonal nuts in strength class ≥ 8 in accordance with DIN 934 as per Table B2; and Hilti installation channels according to Annex B5 to B9.
- MQZ-L13 and MQZ-L13-F drilled plates are used in pairs in conjunction with M12 Hilti threaded rods in strength class ≥ 4.8 in accordance with DIN 976-1 as per Table B3; hexagonal nuts in strength class ≥ 8 in accordance with DIN 934 as per Table B4; and Hilti installation channels according to Annex B5 to B9.

Hilti drilled plates MQZ-L

Requirements for performance assessment

Annex B1

Table B1: Threaded rods for use with Hilti drilled plates MQZ-L11 and MQZ-L11-F

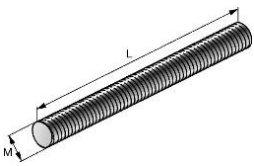
Illustration	Item number	Designation	Metric thread	L [mm]	Material
	339795	AM10x1000 4.8	M10	1000	Strength class 4.8 in accordance with DIN 976-1, zinc coated
	339796	AM10x2000 4.8	M10	2000	
	216418	AM10x3000 4.8	M10	3000	

Table B2: Hexagonal nuts for use with Hilti drilled plates MQZ-L11 and MQZ-L11-F

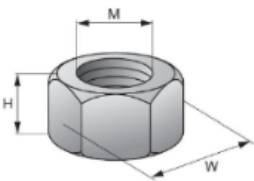
Illustration	Item number	Designation	Metric thread	W [mm]	H [mm]	Material
	216466	M10 hexagonal nut	M10	17	8	Strength class 8 in accordance with DIN 934, zinc coated

Table B3: Threaded rods for use with Hilti drilled plates MQZ-L13

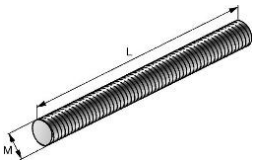
Illustration	Item number	Designation	Metric thread	L [mm]	Material
	339797	AM12x1000 4.8	M12	1000	Strength class 4.8 in accordance with DIN 976-1, zinc coated
	216420	AM12x2000 4.8	M12	2000	
	216421	AM12x3000 4.8	M12	3000	

Table B4: Hexagonal nuts for use with Hilti drilled plates MQZ-L13

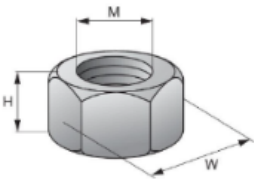
Illustration	Item number	Designation	Metric thread	W [mm]	H [mm]	Material
	2184554	M12 hexagonal nut	M12	19	10	Strength class 8 in accordance with DIN 934, zinc coated

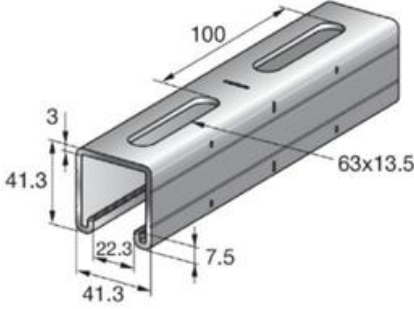
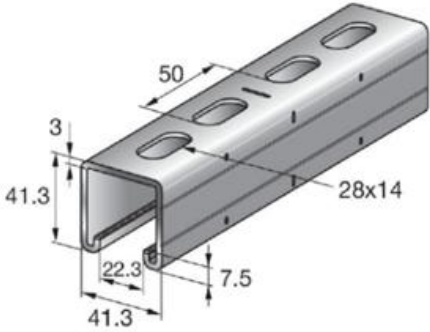
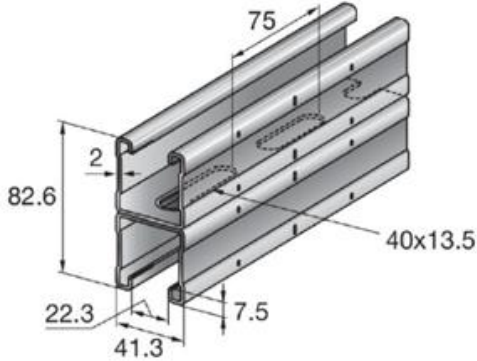
Table B5: Dimensions and materials of Hilti MQ-41/3 3M, MQ-41/3 6M, MQ-41/3 3M LL, MQ-41/3 6M LL, MQ-41 D 3M and MQ-41 D 6M installation channels for use with Hilti drilled plates MQZ-L

Figure ¹⁾	Item number	Designation	Materials and coatings
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Hilti drilled plates MQZ-L

Requirements for performance assessment

Annex B2

	369596	MQ-41/3 3M	S250GD+Z275-M-A-C according to EN 10346
	369597	MQ-41/3 6M	
	2048102	MQ-41/3 3M LL	S250GD+Z275-M-A-C according to EN 10346
	2048103	MQ-41/3 6M LL	
 Two profiles of MQ-41 D 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.	369603	MQ-41 D 3m	S250GD+Z275-M-A-C according to EN 10346
	369604	MQ-41 D 6m	

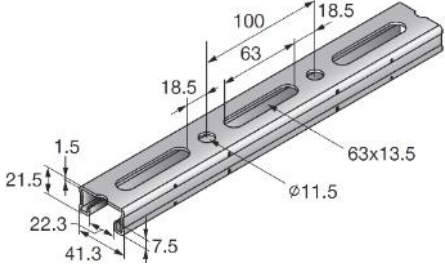
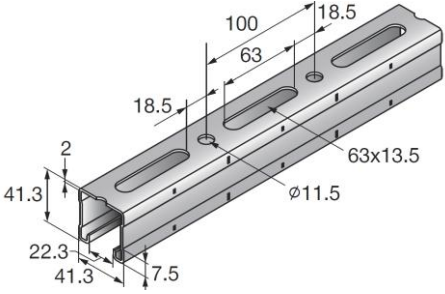
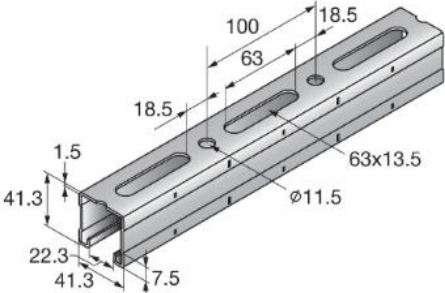
¹⁾ Dimensions in mm

Hilti drilled plates MQZ-L

Requirements for performance assessment

Annex B2

Table B6: Dimensions and materials of Hilti MQ-21.5 6m, MQ-21.5 3m, MQ-21.5 2m, MQ-41 6m, MQ-41 3m, MQ-41 2m, MQ-41-L 6m, MQ-41-L 3m and MQ-41-L 2m installation channels for use with Hilti drilled plates MQZ-L

Figure ¹⁾	Item number	Designation	Materials and coatings
	2184773	MQ-21.5 6m	S280GD+Z140-M-A-C according to DIN EN 10346
	2184772	MQ-21.5 3m	
	2184771	MQ-21.5 2m	
	369592	MQ-41 6m	S250GD+Z275-M-A-C according to DIN EN 10346
	369591	MQ-41 3m	
	304559	MQ-41 2m	
	2141964	MQ-41-L 6m	S250GD+Z140-M-A-C according to DIN EN 10346
	2141965	MQ-41-L 3m	
	2141966	MQ-41-L 2m	

¹⁾ Dimensions in mm

Hilti drilled plates MQZ-L

Requirements for performance assessment

Annex B4

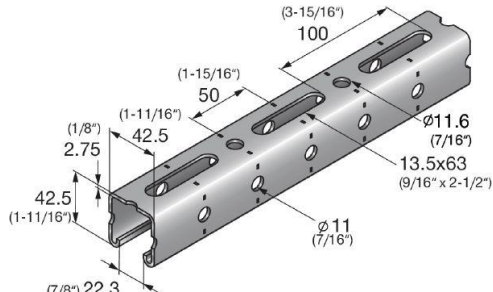
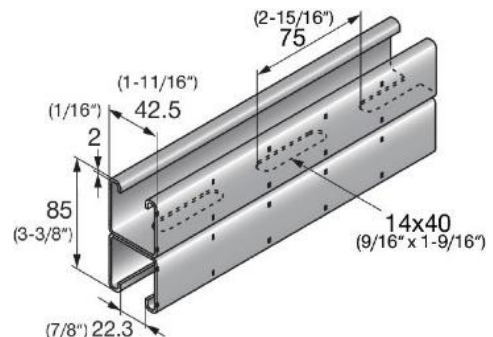
Table B7: Dimensions and materials of Hilti MT-30 S, MT-30, MT-30 S OC, MT-30 OC, MT-40 S, MT-40, MT-40 S OC and MT-40 OC installation channels for use with Hilti drilled plates MQZ-L

Figure ¹⁾	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	

1) Dimensions en mm

Hilti drilled plates MQZ-L	Annex B5
Requirements for performance assessment	

Table B8: Hilti MT-50 S, MT-50, MT-50 S OC, MT-50 OC, MT-40D S, MT-40D, MT-40D S OC, MT-40D OC installation channels for use with Hilti drilled plates MQZ-L

Figure ¹⁾	Item number	Designation	Length [m]	Materials and coatings
	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	
 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.	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
	2268520	MT-40D OC	6	

¹⁾ Dimensions in mm

Hilti drilled plates MQZ-L

Requirements for performance assessment

Annex B6

Table B9: Hilti MT-30 V2 S, MT-30 V2, MT-30 V2 S OC, MT-30 V2 OC, MT-40 V2 S, MT-40 V2, MT-40 V2 S OC, MT-40 V2 OC, MT-40D V2 S, MT-40D V2, MT-40D V2 S OC and MT-40D V2 OC installation channels for use with Hilti drilled plates MQZ-L

Figure ¹⁾	Item number	Designation	Length [m]	Materials and coatings
	2465567	MT-40 V2 S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2465581	MT-40 V2	6	
	2465568	MT-40 V2 S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
	2465569	MT-40 V2 OC	6	
	2465592	MT-30 V2 S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2465565	MT-30 V2	6	
	2465593	MT-30 V2 S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
	2465566	MT-30 V2 OC	6	
Two profiles of MT-40 V2 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.	2465577	MT-40D V2 S	3	S280GD or equivalent as defined in HN704 + Z275-M-A-C acc. to EN 10346
	2465791	MT-40D V2	6	
	2465792	MT-40D V2 S OC	3	S280GD or equivalent as defined in HN704 + ZM310-A-C acc. to EN 10346
	2465578	MT-40D V2 OC	6	

1) Dimensions in mm

Table D1: Resistance of $F_{Rk,t}$ of MQZ-L drilled plates in case of fire after $t = 30, 60, 90$ and 120 minutes in combination with threaded rods $\geq M10$ strength class ≥ 4.8

Drilled plates	Installation channel	Parameter of regression curve	$F_{Rk,t}$ [N]			
		$F_{Rk}(t) = c_3 (c_1 + c_2 / t)$	$F_{Rk,30}$	$F_{Rk,60}$	$F_{Rk,90}$	$F_{Rk,120}$
MQZ-L11 MQZ-L11-F MQZ-L13 MQZ-L13-F	MQ-41/3	$c_1 = 963,5$ $c_2 = 76594,354$ $c_3 = 0,847958$ $25 \text{ min} \leq t \leq 150 \text{ min}$	1491	949	769	679
	MQ-41/3 LL					
	MT-30	$c_1 = 427,2416$ $c_2 = 130158,0662$ $c_3 = 0,910073$ $33 \text{ min} \leq t \leq 130 \text{ min}$	2168,65	1181,50	852,50	687,95
	MT-30 S					
	MT-30 OC					
	MT-30 S OC					
	MT-40					
	MT-40 S					
	MT-40 OC					
	MT-40 S OC					
	MT-50					
	MT-50 S					
	MT-50 OC					
	MT-50 S OC					
	MT-40D					
	MT-40D S					
	MT-40D OC					
	MT-40D S OC					
	MT-40 V2 S	$c_1 = 589,1141$ $c_2 = 109356,633$ $c_3 = 0,908888$ $30 \text{ min} \leq t \leq 130 \text{ min}$	1924,25	1096,00	819,90	681,85
	MT-40 V2					
	MT-40 V2 S OC					
	MT-40 V2 OC					
	MT-40D V2 S					
	MT-40D V2					
	MT-40D V2 S OC					
	MT-40D V2 OC					

Designation

$F_{Rk,t}$ Resistance after an exposure time t in case of fire [N]
 $F_{Rk}(t)$ Resistance time function in case of fire [N]

Hilti drilled plates MQZ-L

Characteristic resistance in case of fire

Annex C1

Table D2: Resistance of $F_{Rk,t}$ of MQZ-L drilled plates with MT-30 V2 channels in case of fire after $t = 30, 60, 90$ and 120 minutes in combination with threaded rods strength class ≥ 4.8

Drilled plates	Installation channel	Parameter of regression curve	$F_{Rk,t}$ [N]			
		$F_{Rk}(t) = c_3 (c_1 + c_2 / t)$	$F_{Rk,30}$	$F_{Rk,60}$	$F_{Rk,90}$	$F_{Rk,120}$
MQZ-L11 MQZ-L11-F MQZ-L13 MQZ-L13-F	MT-30 V2 S	$c_1 = 1079,1688$ $c_2 = 91433,702$ $c_3 = 0,853993$ $30 \text{ min} \leq t \leq 135 \text{ min}$	1762,2	1111,5	894,6	786,15
	MT-30 V2					
	MT-30 V2 S OC					
	MT-30 V2 OC					

Designation

$F_{Rk,t}$ Resistance after an exposure time t in case of fire [N]
 $F_{Rk}(t)$ Resistance time function in case of fire [N]

Hilti drilled plates MQZ-L

Characteristic resistance in case of fire

Annex C2