

4.2 MQ System Components — Load Data and Material Specifications

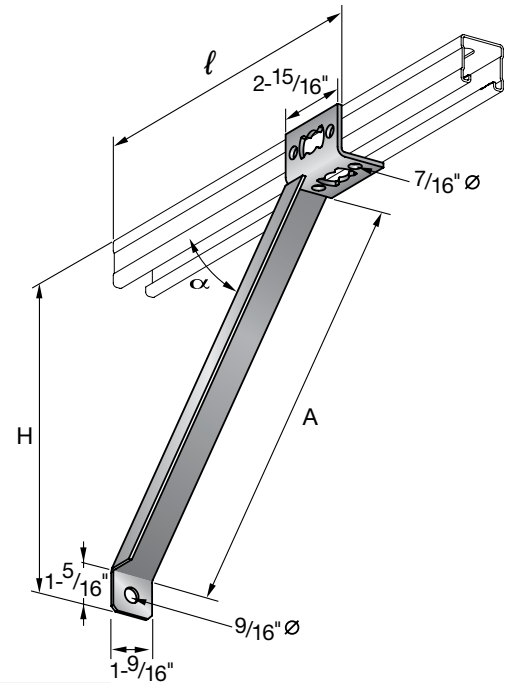
MQK Angle brace

Product Features

- Construction of wall brackets
- Two-hole angle base for MQN pushbutton
- Two strut open slot orientations possible

Material Specifications

Materials	Carbon steel, S 235 JR (DIN EN 10025), ASTM A283 (D) Stainless steel, 1.4571 or 1.4404, (316 Ti or 316 L)
Material width	1-9/16" (40 mm)
Material thickness	3/16" or 1/8" (4 mm or 3 mm)
Finishes	Electro-galvanized

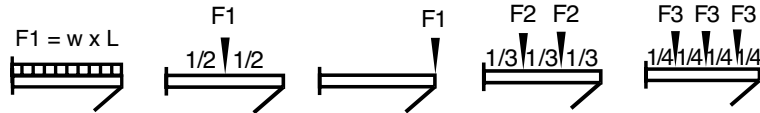


Ordering Information MQK-Angle Brace

Description	A in. (mm)	H in. (mm)	ℓ in. (mm) ¹	α	Qty	Item No.
MQK-SK (short brace)	14" (355)	13" (328)	12-13/16" (324)	45°	10	369622
MQK-SK-F (HDG-short brace)	14" (355)	13" (328)	12-13/16" (324)	45°	10	304129
MQK-SL (long brace)	25" (635)	20-7/8" (528)	20-1/2" (524)	45°	10	369621
MQK-SL-R (SS316 - long brace)	25" (635)	20-7/8" (528)	20-1/2" (524)	45°	10	304010

¹ ℓ length does not include base plate thickness of MQK Bracket.

Technical Data — Allowable Loads for Carbon and Stainless Steels



Bracket	Angle Brace	Bracket Strut Length		F1		F1		F1		F2		F3	
		L (in.)	L (mm)	lb	N	lb	N	lb	N	lb	N	lb	N
MQK-21/450	MQK-SK	17-11/16	450	994	4420	256	1140	117	520	443	1970	393	1750
MQK-41/600	MQK-SL	23-5/8	600	1245	5540	580	2580	638	2840	564	2510	425	1890
MQK-41/3/600	MQK-SL	23-5/8	600	1277	5680	744	3310	638	2840	638	2840	425	1890
MQK-72/600	MQK-SL	23-5/8	600	1277	5680	1277	5680	638	2840	638	2840	425	1890
MQK-21 D/600	MQK-SL	23-5/8	600	1182	5260	551	2450	638	2840	537	2390	420	1870
MQK-41 D/750	MQK-SL	29-1/2	750	1018	4530	1018	4530	508	2260	508	2260	339	1510
MQK-41 D/1000	MQK-SL	39-3/8	1000	650	2890	650	2890	324	1440	324	1440	216	960

- Loading capacity of bracket fastened to concrete with KB-TZ 1/2" x 3-3/4" (with an embedment depth of 3" using ASD allowable load values) or KH-EZ 1/2" x 4".
- The deflection of L/150 was observed at the point of load application.
- The loads apply only when strut opening pointing upwards or downwards.
- The bracket's own weight has been accounted for.
- Concrete strength minimum 3000 psi.
- Fastener loads based on no edge distance or anchor spacing effects. Reference Vol. 2 Hilti Anchoring Technical Guide for details.
- Engineer of record is responsible for verifying suitability of the components, connection, anchor selection and base material for any specific application.
- The application guidelines applicable to the anchor must be observed. Reference Vol. 2 Hilti Anchoring Technical Guide.
- Load values for steel are based on the lesser of allowable stress, 25,000 psi, or a deflection limit of L/150 at the outer most loading point.