Bolt anchor FAZ II

For highest demands. Powerful and flexible.

Balcony railings

Steel girders

VERSIONS

- Zinc-plated steel
- Stainless steel
- Highly corrosion-resistant steel

BUILDING MATERIALS

Approved for:

- Concrete C20/25 to C50/60, cracked and non-cracked

Also suitable for:

- Concrete C12/15
- Concrete C80/95
- Natural stone with dense structure

CERTIFICATES

ETA-05/0069
EAD 330232-00-0601
Option 1 for cracked concrete
Seismic performance category C1, C2

FM APPROVED from M10

ICC ES ESR-2948 — See ICC-ES Evaluation Report at www.icc-es.org

Fire resistance classification R 120 — Anchor types see test report

EDELSTAHL Rostfrei — INOX STAINLESS STEEL

M8 - M20

ZTV — anchor types see test report (only FAZ II C) — 1200 °C

SEISMIC

ADVANTAGES

- According to the new assessment (ETA) the tensile load capacities are decisively increased. This requires less anchors.
- The variable anchorage depths for the sizes M8 to M16 allow for the first time a millimeter-accurate adjustment to the loads.
- The design with cap nut offers a visually attractive anchoring and protects against injuries due to the round head shape.
- The first bolt anchor M6 with ETA Assessment for Option 1, for secure and approved anchorage.
- The international approvals guarantees maximum safety and the best performance.
- Approved for diamond-drilled holes.

APPLICATIONS

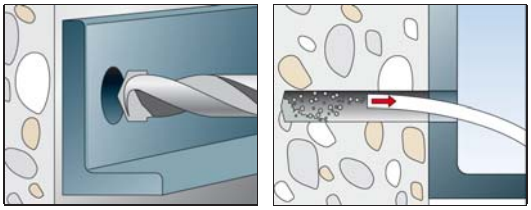
- Steel constructions
- Guard rails
- Consoles
- Ladders
- Cable trays
- Machines
- Staircases
- Gates
- Façades
- Timber constructions

FUNCTIONING

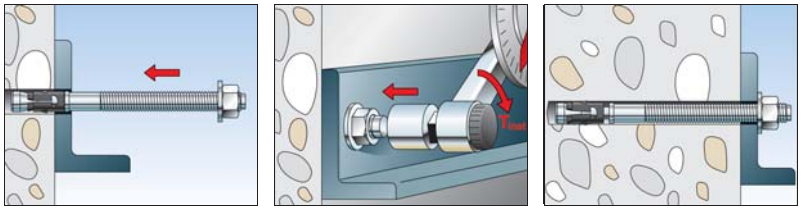
- The FAZ II is suitable for pre-positioned and push-through installation and is also ideal for stand-off installation thanks to the long thread.
- When applying the torque, the cone bolt is pulled into the expansion sleeve and expand it against the drill hole wall.
- The anchor is set in line with the approval once the preset installation torque is achieved.
- In the case of series installation, we recommend using the FABS anchor bolt setting tool.

Elite Fasteners
Specialist Distributors To The Construction Industry

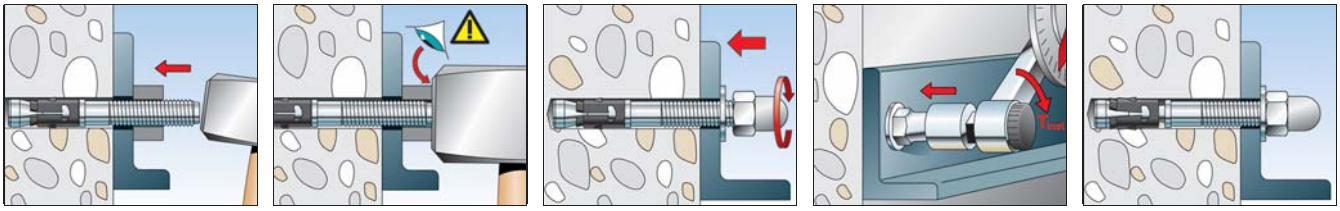
DRILL HOLE PREPARATION



PUSH-THROUGH INSTALLATION WITH HEXAGON NUT

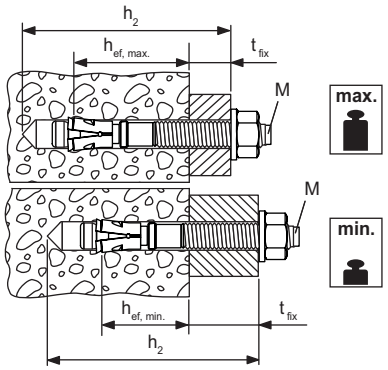


PUSH-THROUGH INSTALLATION OF THE CUP NUT VERSION WITH SETTING GAUGE



TECHNICAL DATA

Bolt anchor **FAZ II**



	Zinc-plated steel	Stainless steel	Highly corrosion resistant steel	Approval		Seismic-Approval	Drill hole diameter	Min. drill hole depth for through fixings	Anchor length	Max. usable length hef,max./ hef,min.	Thread	Width across nut	Sales unit
	Art.-No.	Art.-No.	Art.-No.	ETA	ICC		d_0	h_2	l	t_{fix}	Ø x length	⬡ SW	
Item	gvz	A4	C				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[pcs]
FAZ II 6/10	**542621**	**542623**	–	■	–	–	6	60	65	10/-	M 6 x 25	10	50
FAZ II 6/20	**542622**	**542624**	–	■	–	–	6	70	75	20/-	M 6 x 35	10	50
FAZ II 8/10	**094871** 1)	**501396** 1)	–	■	▲	C1	8	65	75	10/20	M 8 x 38	13	50
FAZ II 8/10	–	–	**501428** 1)	■	▲	C1	8	65	75	10/20	M 8 x 38	13	10
FAZ II 8/30	**094877** 1)	**501399** 1)	–	■	▲	C1	8	85	95	30/40	M 8 x 58	13	50
FAZ II 8/30	–	–	**501429** 1)	■	▲	C1	8	85	95	30/40	M 8 x 58	13	10
FAZ II 8/50	**094878** 1)	**501401**	–	■	▲	C1	8	105	115	50/60	M 8 x 78	13	50
FAZ II 8/100	**094879** 1)	–	–	■	▲	C1	8	155	165	100/110	M 8 x 128	13	25
FAZ II 8/160	**503251** 1)	–	–	■	▲	C1	8	215	225	160/170	M 8 x 100	13	20
FAZ II 10/10	**094981**	**501403**	–	■	▲	C1 / C2	10	85	95	10/30	M 10 x 53	17	50
FAZ II 10/10	–	–	**501430**	■	▲	C1	10	85	95	10/30	M 10 x 53	17	10
FAZ II 10/20	**094982**	–	–	■	▲	C1 / C2	10	95	105	20/40	M 10 x 63	17	25
FAZ II 10/20	–	**501406**	–	■	▲	C1 / C2	10	95	105	20/40	M 10 x 63	17	50
FAZ II 10/30	**094983**	–	–	■	▲	C1 / C2	10	105	115	30/50	M 10 x 73	17	25
FAZ II 10/30	–	**501407**	–	■	▲	C1 / C2	10	105	115	30/50	M 10 x 73	17	50
FAZ II 10/30	–	–	**503185**	■	▲	C1	10	105	115	30/50	M 10 x 73	17	10
FAZ II 10/50	**094984**	**501409**	–	■	▲	C1 / C2	10	125	135	50/70	M 10 x 93	17	20
FAZ II 10/70	–	**501410**	–	■	▲	C1 / C2	10	145	155	70/90	M 10 x 113	17	20
FAZ II 10/80	**094985**	–	–	■	▲	C1 / C2	10	155	165	80/100	M 10 x 123	17	20
FAZ II 10/100	–	**501411**	–	■	▲	C1 / C2	10	175	185	100/120	M 10 x 100	17	20
FAZ II 10/100	**094986**	–	–	■	▲	C1 / C2	10	175	185	100/120	M 10 x 143	17	20
FAZ II 10/160	–	**501412**	–	■	▲	–	10	235	245	160/180	M 10 x 100	17	20
FAZ II 10/160	**503252**	–	–	■	▲	–	10	235	245	160/180	M 10 x 193	17	20
FAZ II 12/10	**095419**	**501413**	–	■	▲	C1 / C2	12	100	110	10/30	M 12 x 61	19	20

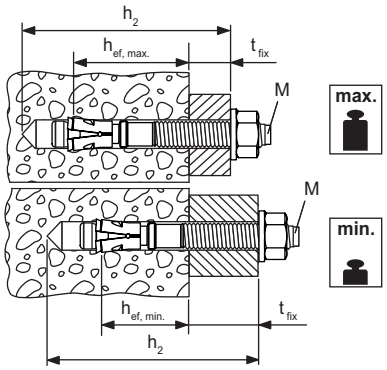
1) With minimum embedment depth only for statically interdeterminate systems

Approval Seismic C1/C2 only with maximum embedment depth

Bolt anchor FAZ II

TECHNICAL DATA

Bolt anchor **FAZ II**



	Zinc-plated steel	Stainless steel	Highly corrosion resistant steel	Approval		Seismic-Approval	Drill hole diameter	Min. drill hole depth for through fixings	Anchor length	Max. usable length hef,max./ hef,min.	Thread	Width across nut	Sales unit
	Art.-No.	Art.-No.	Art.-No.	ETA	ICC		d_0 [mm]	h_2 [mm]	l [mm]	t_{fix} [mm]	Ø x length [mm]	⬡ SW [mm]	[pcs]
Item	gvz	A4	C										
FAZ II 12/10	–	–	503186	■	▲	C1	12	100	110	10/30	M 12 x 61	19	10
FAZ II 12/20	095420	501415	–	■	▲	C1 / C2	12	110	120	20/40	M 12 x 71	19	20
FAZ II 12/30	095421	501416	–	■	▲	C1 / C2	12	120	130	30/50	M 12 x 81	19	20
FAZ II 12/30	–	–	501431	■	▲	C1	12	120	130	30/50	M 12 x 81	19	10
FAZ II 12/50	095446	501419	–	■	▲	C1 / C2	12	140	150	50/70	M 12 x 101	19	20
FAZ II 12/60	–	501420	–	■	▲	C1 / C2	12	150	160	60/80	M 12 x 111	19	20
FAZ II 12/80	095454	–	–	■	▲	C1 / C2	12	170	180	80/100	M 12 x 131	19	20
FAZ II 12/100	095470	501421	–	■	▲	C1 / C2	12	190	200	100/120	M 12 x 151	19	20
FAZ II 12/160	503253	–	–	■	▲	–	12	250	260	160/180	M 12 x 186	19	10
FAZ II 12/160	–	503180	–	■	▲	–	12	250	260	160/180	M 12 x 100	19	20
FAZ II 12/200	095605	–	–	■	▲	–	12	290	300	200/220	M 12 x 186	19	10
FAZ II 16/5	522124	–	–	■	▲	C1 / C2	16	115	128	5/25	M 16 x 64	24	10
FAZ II 16/5	–	522125	–	■	▲	C1 / C2	16	115	128	5/25	M 16 x 64	24	20
FAZ II 16/25	–	501423	–	■	▲	C1 / C2	16	135	148	25/45	M 16 x 84	24	20
FAZ II 16/25	–	–	501432	■	▲	C1	16	135	148	25/45	M 16 x 84	24	10
FAZ II 16/25	095836	–	–	■	▲	C1 / C2	16	135	148	25/45	M 16 x 84	24	10
FAZ II 16/50	095864	–	–	■	▲	C1 / C2	16	160	173	50/70	M 16 x 109	24	10
FAZ II 16/50	–	–	503187	■	▲	C1	16	160	173	50/70	M 16 x 109	24	10
FAZ II 16/50	–	501424	–	■	▲	C1 / C2	16	160	173	50/70	M 16 x 109	24	20
FAZ II 16/100	095865	501425	–	■	▲	C1 / C2	16	210	223	100/120	M 16 x 159	24	10
FAZ II 16/160	503254	–	–	■	▲	C1 / C2	16	270	283	160/180	M 16 x 189	24	10
FAZ II 16/200	095967	–	–	■	▲	–	16	310	323	200/220	M 16 x 189	24	10
FAZ II 16/250	095968	–	–	■	▲	–	16	360	373	250/270	M 16 x 100	24	10
FAZ II 16/300	096188	–	–	■	▲	–	16	410	423	300/320	M 16 x 100	24	10
FAZ II 20/30	046632	–	–	■	▲	C1 / C2	20	155	172	30/-	M 20 x 54	30	5
FAZ II 20/30	–	501426	–	■	▲	C1 / C2	20	155	172	30/-	M 20 x 54	30	4
FAZ II 20/60	046633	–	–	■	▲	C1 / C2	20	185	202	60/-	M 20 x 84	30	5
FAZ II 20/60	–	503183	–	■	▲	C1 / C2	20	185	202	60/-	M 20 x 84	30	4
FAZ II 20/160	503255	–	–	■	▲	C1 / C2	20	285	302	160/-	M 20 x 100	30	5
FAZ II 24/30	046635	–	–	■	▲	C1	24	185	205	30/-	M 24 x 58	36	5
FAZ II 24/30	–	501427	–	■	▲	C1	24	185	205	30/-	M 24 x 58	36	4
FAZ II 24/60	046636	–	–	■	▲	C1	24	215	235	60/-	M 24 x 88	36	5
FAZ II 24/60	–	503184	–	■	▲	C1	24	215	235	60/-	M 24 x 88	36	4

1) With minimum embedment depth only for statically interdeterminate systems

Approval Seismic C1/C2 only with maximum embedment depth

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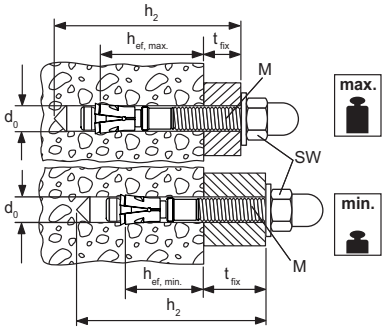
TECHNICAL DATA

Bolt anchor **FAZ II H**

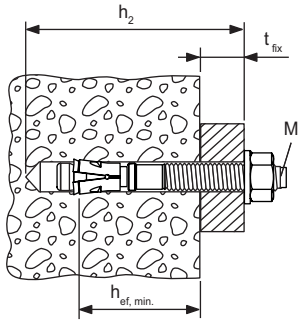


	Zinc-plated steel	Stainless steel	Approval		Seismic-Approval	Drill hole diameter	Min. drill hole depth for through fixings	Anchor length	Max. usable length hef,max./ hef,min.	Thread	Width across nut	Sales unit
	Art.-No.	Art.-No.	ETA	ICC		d_0 [mm]	h_2 [mm]	l [mm]	t_{fix} [mm]	Ø x length [mm]	⬡ SW [mm]	[pcs]
Item	**gvz**	**A4**										
FAZ II 10/10 H	**543392**	**543396**	■	–	C1 / C2	10	87	95	10/30	M 10 x 53	17	20
FAZ II 10/20 H	**543393**	**543397**	■	–	C1 / C2	10	97	105	20/40	M 10 x 63	17	20
FAZ II 12/10 H	**543394**	**543398**	■	–	C1 / C2	12	99	109	10/30	M 12 x 61	19	20
FAZ II 12/20 H	**543395**	**543399**	■	–	C1 / C2	12	109	119	20/40	M 12 x 71	19	20

Approval Seismic C1/C2 only with maximum embedment depth

TECHNICAL DATA

Bolt anchor **FAZ II K**



	Zinc-plated steel	Stainless steel	Approval	Drill hole diameter	Min. drill hole depth for through fixings	Anchor length	Usable length (hef min.)	Thread	Washer (outer diameter x thickness)	Sales unit
	Art.-No.	Art.-No.	ETA	d_0 [mm]	h_2 [mm]	l [mm]	t_{fix} [mm]	Ø x length [mm]	[mm]	[pcs]
Item	**gvz**	**A4**								
FAZ II 8/5 K	**538989**	**538990**	■	8	45	60	5	M 8 x 23	16 x 1,6	50
FAZ II 10/10 K	**522108**	**522116**	■	10	65	75	10	M 10 x 33	20 x 2	50
FAZ II 10/20 K	**522110**	–	■	10	75	85	20	M 10 x 43	20 x 2	25
FAZ II 10/20 K	–	**522117**	■	10	75	85	20	M 10 x 43	20 x 2	50
FAZ II 12/10 K	**522118**	**522122**	■	12	80	90	10	M 12 x 41	24 x 2,5	20
FAZ II 12/20 K	**522119**	**522123**	■	12	90	100	20	M 12 x 51	24 x 2,5	20
FAZ II 10/10 K GS	**522115**	–	■	10	65	75	10	M 10 x 33	25 x 3	50
FAZ II 12/10 K GS	**522121**	–	■	12	80	90	10	M 12 x 41	30 x 3	20

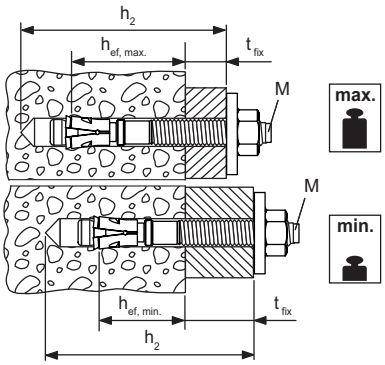
Elite Fasteners
Specialist Distributors To The Construction Industry

Bolt anchor FAZ II

TECHNICAL DATA

Bolt anchor **FAZ II GS** (with large washer)

Bolt anchor **FAZ II HBS** (washer compliant to wood construction standard DIN 1052)



	Steel, zinc-plated, with large washer	Stainless steel, with large washer	Approval	Seismic-Approval	Drill hole diameter	Min. drill hole depth for through fixings	Anchor length	Max. usable length hef,max./ hef,min.	Thread	Width across nut	Washer (outer diameter x thickness)	Sales unit
	Art.-No.	Art.-No.	ETA		d_0 [mm]	h_2 [mm]	l [mm]	t_{fix} [mm]	Ø x length [mm]	⬡ SW [mm]	[mm]	[mm]
Item	gvz	A4										
FAZ II 8/10 GS	094872	501398	■	C1	8	65	75	10/20	M 8 x 38	13	22 x 2,5	50
FAZ II 8/30 GS	096189	501400	■	C1	8	85	95	30/40	M 8 x 58	13	22 x 2,5	50
FAZ II 10/10 GS	096291	501405	■	C1 / C2	10	85	95	10/30	M 10 x 53	17	25 x 3	50
FAZ II 10/30 GS	096297	–	■	C1 / C2	10	105	115	30/50	M 10 x 73	17	25 x 3	25
FAZ II 10/30 GS	–	501408	■	C1 / C2	10	105	115	30/50	M 10 x 73	17	25 x 3	50
FAZ II 12/10 GS	096303	501414	■	C1 / C2	12	100	110	10/30	M 12 x 61	19	30 x 3	20
FAZ II 12/20 GS	502530	–	■	C1 / C2	12	110	120	20/40	M 12 x 71	19	30 x 3	20
FAZ II 12/30 GS	096340	501418	■	C1 / C2	12	120	130	30/50	M 12 x 81	19	30 x 3	20
FAZ II 12/50 GS	502531	–	■	C1 / C2	12	140	150	50/70	M 12 x 101	19	30 x 3	20
FAZ II 12/80 GS	538430	–	■	C1 / C2	12	170	180	80/100	M 12 x 131	19	44 x 4	20
FAZ II 12/100 GS	502532	–	■	C1 / C2	12	190	200	100/120	M 12 x 151	19	30 x 3	20
FAZ II 12/100 GS	538702	–	■	C1 / C2	12	190	200	100/120	M 12 x 151	19	44 x 4	20
FAZ II 12/120 GS	096367	–	■	C1 / C2	12	210	220	120/140	M 12 x 171	19	30 x 3	20
FAZ II 12/120 GS	538703	–	■	C1 / C2	12	210	220	120/140	M 12 x 171	19	44 x 4	20
FAZ II 12/140 GS	538433	–	■	C1 / C2	12	230	240	140/160	M 12 x 186	19	44 x 4	20
FAZ II 12/160 GS	538431	–	■	C1 / C2	12	250	260	160/180	M 12 x 186	19	44 x 4	20
FAZ II 12/160 GS	–	503181	■	–	12	250	260	160/180	M 12 x 186	19	44 x 4	20
FAZ II 12/180 GS	538434	–	■	C1 / C2	12	270	280	180/200	M 12 x 186	19	44 x 4	20
FAZ II 12/200 GS	538432	–	■	C1 / C2	12	290	300	200/220	M 12 x 186	19	44 x 4	20
FAZ II 16/160 GS	503261	–	■	C1 / C2	16	270	283	160/180	M 16 x 189	24	56 x 5	10
FAZ II 16/160 GS	–	503182	■	C1 / C2	16	270	283	160/180	M 16 x 100	24	56 x 5	4
FAZ II 16/200 GS	096370	–	■	–	16	310	323	200/220	M 16 x 189	24	56 x 5	10
FAZ II 12/100 HBS	522951	–	■	C1 / C2	12	190	205	100/120	M 12 x 151	19	58 x 6	20
FAZ II 12/120 HBS	522952	–	■	C1 / C2	12	210	225	120/140	M 12 x 171	19	58 x 6	20
FAZ II 16/160 HBS	522953	–	■	C1 / C2	16	270	278	160/180	M 16 x 189	24	68 x 6	10
FAZ II 16/200 HBS	522954	–	■	–	16	310	328	200/220	M 16 x 189	24	68 x 6	10

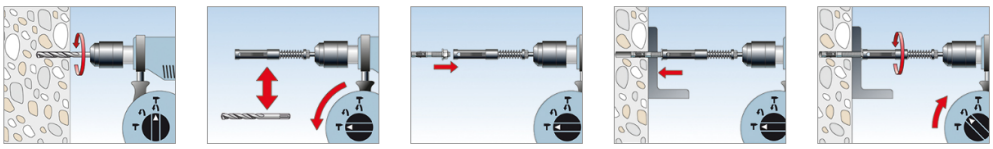
ACCESSORIES

fischer Anchor bolt setting tool **FABS**

setting tool **FA-ST**

Item	Art.-No.	Matching anchor type	Sales unit [pcs]
FABS	077937	FAZ II, FBZ, FBN II for diameter from M8 - M12	1
FA-ST M10	541891	FAZ II M10, FBZ M10, FBN II M10	1
FA-ST M12	541892	FAZ II M12, FBZ M12, FBN II M12	1

FA-ST



LOADS

Bolt anchor FAZ II, FAZ II K and FAZ II GS (HBS)

zinc plated steel / stainless steel / high corrosion resistant steel

Permissible loads of a single anchor in cracked normal concrete (concrete tension zone) of strength class C20/25 (~B25) [1) 2) 3) 9)]										Minimum spacings while reducing the load	
Type	Material fixing element	Min. member thickness h_{min} [mm]	Effective anchorage depth h_{ef} [4)] [mm]	Installation torque T_{inst} [Nm]	Permissible tensile load N_{perm} [6)] [kN]	Permissible shear load V_{perm} [6)] [kN]	Required edge distance (with one edge) for: Max. tension load c [mm]	Required edge distance (with one edge) for: Max. shear load c [mm]	Required spacing for: Max. Load s [mm]	Min. spacing s_{min} [7)] [mm]	Min. edge distance c_{min} [7)] [mm]
FAZ II 6	gvz	80	40	8	0,7	3,4	45	80	120	35	45
	A4					5,0		125			
	C										
FAZ II 8	gvz	80	35[5)]	20	2,6	7,8	40	200	105	35	40
		90	45		3,8		45	185	135		
	A4	80	35[5)]		2,6	8,9	40	235	105		
		90	45		3,8	9,6	45		135		
	C	80	35[5)]		2,6	8,9	40		105		
		90	45		3,8	9,6	45		135		
FAZ II 10	gvz	90	40	45	4,3	11,3	60	275	120	40	45
		110	60		6,2	12,2	65	255	180		
	A4	90	40		4,3	11,3	60	275	120		
		110	60		6,2	15,1	65	325	180		
	C	90	40		4,3	11,3	60	275	120		
		110	60		6,2	15,1	65	325	180		
FAZ II 12	gvz	100	50	60	6,1	17,5	75	400	150	50	55
		120	70		9,5		100	350	210		
	A4	100	50		6,1	18,8	75	435	150		
		120	70		9,5	21,9	100	450	210		
	C	100	50		6,1	18,8	75	435	150		
		120	70		9,5	21,9	100	450	210		
FAZ II 16	gvz	140	65	110	9,0	28,7	100	545	195	65	65
			85		13,4	31,4	130	585	255		
	A4		65		9,0	28,7	100	545	195		
			85		13,4	39,9	130	760	255		
	C		65		9,0	28,7	100	545	195		
			85		13,4	39,9	130	760	255		
FAZ II 20	gvz	170	100	200	17,1	44,6	150	745	300	95	85
	A4										
	C										
FAZ II 24	gvz	210	125	270	24,0	57,5	170	840	375	100	100
	A4										
	C										

For the design the complete assessment ETA-05/0069, issue date 03.07.2017 has to be considered.[8)]

[1)] The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of γ_L = 1,4 are considered. As an single anchor under tension load and shear load without edge influence counts e.g. an anchor with a spacing $s \geq 3 \cdot h_{ef}$ and an edge distance $c \geq 1.5 \cdot h_{ef}$. Concerning shear loads under edge influence and accurate data see ETA.

[2)] For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

[3)] Drill method hammer drilling, hollow drilling resp. Diamond drilling.

[4)] Eff. anchorage depth: min. anchorage depth, max. anchorage depth.

[5)] The anchorage depths smaller than 40 mm are only allowed for single anchors as part of a multiple fixing of non-structural systems.

[6)] For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see ETA.

[7)] Minimum possible axial spacings resp. edge distance while reducing the permissible load.

[8)] The given loads refer to the European Technical Assessment ETA-05/0069, issue date 03.07.2017. Design of the loads according TR055/ETAG 001, Annex C, Method A (for static resp. quasi-static loads).

[9)] A reinforcement in the concrete to prevent splitting is required. The width of the cracks has to be limited under consideration of the splitting forces at $w_k \sim 0.3$mm.

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LOADS

Bolt anchor FAZ II, FAZ II K and FAZ II GS (HBS)

zinc plated steel / stainless steel / high corrosion resistant steel

Permissible loads of a single anchor in non-cracked normal concrete (concrete compression zone) of strength class C20/25 (~B25) [1) 2) 3)]										Minimum spacings while reducing the load	
Type	Material fixing element	Min. member thickness h_{min} [mm]	Effective anchorage depth h_{ef} [4)] [mm]	Installation torque T_{inst} [Nm]	Permissible tensile load N_{perm} [6)] [kN]	Permissible shear load V_{perm} [6)] [kN]	Required edge distance (with one edge) for: Max. tension load c [mm]	Required edge distance (with one edge) for: Max. shear load c [mm]	Required spacing for: Max. Load s [mm]	Min. spacing s_{min} [7)] [mm]	Min. edge distance c_{min} [7)] [mm]
FAZ II 6	gvz	80	40	8	3,6	3,4	45	55	120	35	45
	A4				5,0	5,0	50	85			
	C										
FAZ II 8	gvz	80	35[5)]	20	5,0	7,8	85	140	105	40	40
		90	45		6,7		80	125	135		
	A4	80	35[5)]		5,0	9,6	85	175	105		
		90	45		6,7		80	160	135		
	C	80	35[5)]		5,0		85	175	105		
		90	45		6,7		80	160	135		
FAZ II 10	gvz	90	40	45	6,1	12,2	80	205	120	40	45
		110	60		9,5		75	175	180		
	A4	90	40		6,1	15,1	80	260	120		
		110	60		9,5		75	220	180		
	C	90	40		6,1		80	260	120		
		110	60		9,5		75	220	180		
FAZ II 12	gvz	100	50	60	8,5	17,5	100	275	150	50	55
		120	70		10,5		80	240	210		
	A4	100	50		8,5	21,9	100	350	150		
		120	70		10,5		80	305	210		
	C	100	50		8,5		100	350	150		
		120	70		10,5		80	305	210		
FAZ II 16	gvz	140	65	110	12,6	31,4	130	410	195	65	65
			85		18,8		170	400	255		
	A4		65		12,6	39,9	130	535	195		
			85		18,8		170	520	255		
	C		65		12,6		130	535	195		
			85		18,8		170	520	255		
FAZ II 20	gvz	170	100	200	24,0	46,5	230	530	300	95	95
	A4					60,7		515			
	C										
FAZ II 24	gvz	210	125	270	33,6	62,9	265	630	375	100	135
	A4					80,7		835			
	C										

For the design the complete assessment ETA-05/0069, issue date 03.07.2017 has to be considered.[8)]

[1)] The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of γ_L = 1,4 are considered. As an single anchor under tension load and shear load without edge influence counts e.g. an anchor with a spacing $s \geq 3 \cdot h_{ef}$ and an edge distance $c \geq 1.5 \cdot h_{ef}$. Concerning shear loads under edge influence and accurate data see ETA.

[2)] For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

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[7)] Minimum possible axial spacings resp. edge distance while reducing the permissible load.

[8)] The given loads refer to the European Technical Assessment ETA-05/0069, issue date 03.07.2017. Design of the loads according TR055/ETAG 001, Annex C, Method A (for static resp. quasi-static loads).

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