

No.	Name	Material
1	Anchor	Zinc plated steel
2	Hexagon screw	Zinc plated steel 8.8

Building materials



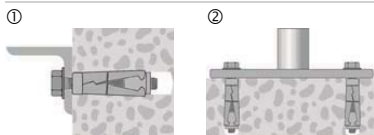
Qualities



Characteristics

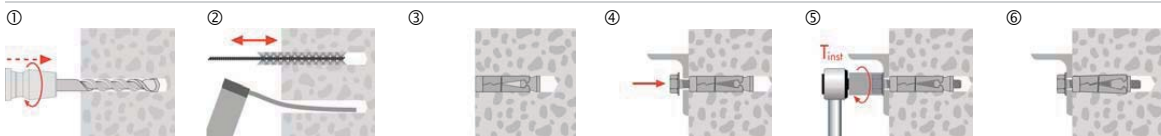
- Force-controlled anchor with hexagon screw.
- Expansion sleeves and cone made of steel.
- Strong expansion throughout the depth of the drill hole.
- Assembling in most concrete qualities, natural stone and solid brick with accordant firmnesses.
- Application also in some perforated materials.
- Disassembling possible.

Applications



- ① Connection assembling.
- ② Floor assembling.
- Application on metal, machines, scaffolds, facades and door constructions.

Installation



- ① Take drill hole- \varnothing and drill hole depth from the table.
- ② Clean the drill hole with a brush, then blow it out with a purging pump (not necessary with perforated brick).
- ③ Insert the Shield Anchor into the building material.
- ④ Position the Building materials and insert the screw.
- ⑤ Tighten the screw with a torque spanner to the predetermined value T_{inst} .

All information detailed in our data sheets is based on technical approvals, formulas and site and laboratory testing under optimum conditions and include a stated safety factor. As we have no direct or indirect control over where or how our products are applied or installed, we do not accept any liability either directly or indirectly arising from the use of our products, whether or not in accordance with any advice, specification or recommendation given by us and we recommend site testing of all products for suitability.

Anchor size		M6	M8	M10			M12		M16		
Recommended tension loads: ¹⁾											
N _{Emp}	- Concrete uncracked C20/25 - C50/60	kN	3.3	4.8	6.2			9.7		19	
	- Solid brick, brick and sandstone		1.8	2.3	2.9			4.3		-	
Recommended shear loads:											
V _{Emp}	- Concrete uncracked C20/25 - C50/60	kN	6.8	8.7	13.7			19.9		35.8	
	- Solid brick, brick and sandstone		1.8	2.3	2.9			4.3		-	
M _{Emp}	Recommended bending moment	Nm	9.4	17.1	34.2			60		152	
c	Min. distance to edge for tension load	mm	80	100	120			160		190	
c	Min. distance to edge for shear load	mm	100	120	160			180		260	
s	Min. distance betw. anchors	mm	120	150	180			250		290	
h _{min}	Min. thickness of foundation	mm	70	80	100			120		190	
h _{ef}	Effective anchorage depth	mm	42	43	50			62		98	
d _s	Screw-Ø	M	6	8	10			12		16	
SW	Spanner size	mm	10	13	17			19		24	
T _{inst}	Torque at anchoring in concrete	Nm	6.5	15	27			50		120	
T _{inst}	Torque at anchoring in solid brick, brick and sandstone	Nm	5	7.5	13			23		-	
h ₁	Drill hole depth	mm	55	65	85			105		145	
d ₀	Drill hole-Ø in the building material	mm	12	14	16			20		25	
d _{cut}	Max. drill cut-Ø	mm	12.5	14.5	16.5			20.5		25.5	
d _f	Hole-Ø in the attached part	mm	7	9	12			14		18	
l	Anchor length	mm	70	80	75	90	115	105	140	150	180
d _{nom}	Anchor-Ø	mm	12	14	16			20		25	
t _{fix}	Assembling length usable	mm	25	25	10	25	50	25	60	30	60



Shield Anchor, steel

1) Without influence of anchor and edge distance / safety factor: breakage of concrete 3, breakage of steel 2.2