

NEW **FIX 3**

Stud Anchors for Non-Cracked Concrete

Fast and convenient the New FIX3 stud anchor is suitable for a broad range of applications in the compression zone of concrete, either pre-fastened or through fixed. This innovative new product has high load capacity, limited only to the concrete cone failure, plus excellent edge and spacing limitations.

Product Advantages

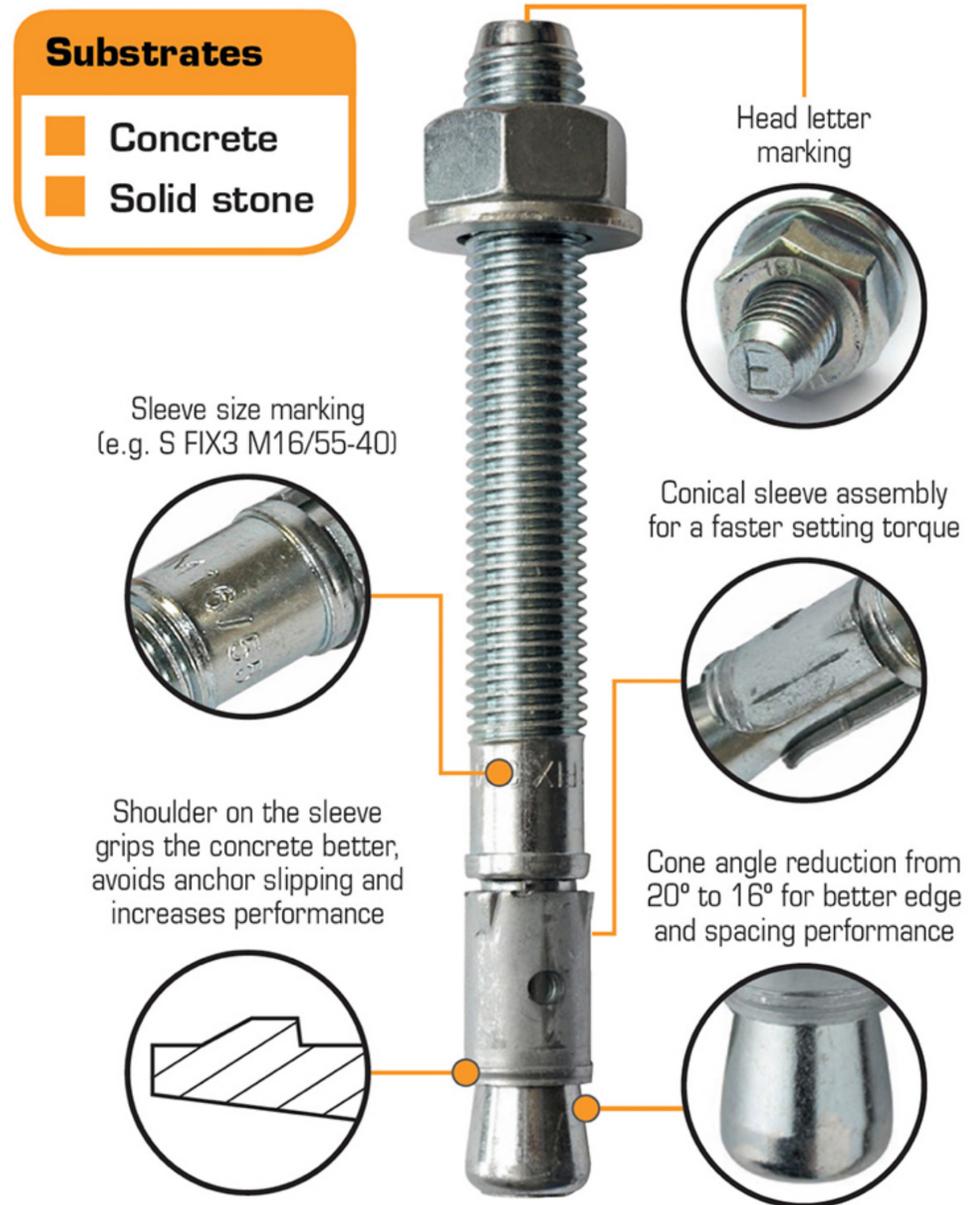
- ✔ **Versatile anchor** for columns, beams, brackets and plates in concrete.
- ✔ Offers one of the **highest loads** of any ETA Option 7 approved anchor.
- ✔ **30% higher performance** - limited only by the type of concrete used.
- ✔ **Reduced edge and spacing distance.**
- ✔ **Clear sleeve and head marking** - offering pre-installation and post-installation guidance.

Typical Applications

- Curtain wall
- Guide rails / railings / machinery
- Industrial doors and gates
- Brickwork support angles
- Storage systems / pallet racking
- Stadium seating / fencing posts
- Steel and timber framework



ETA OPTION 7
n° 13/0005



Product Specifications

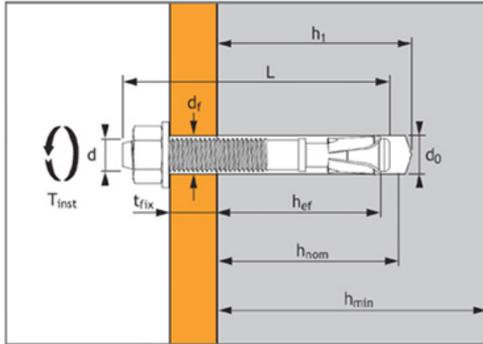
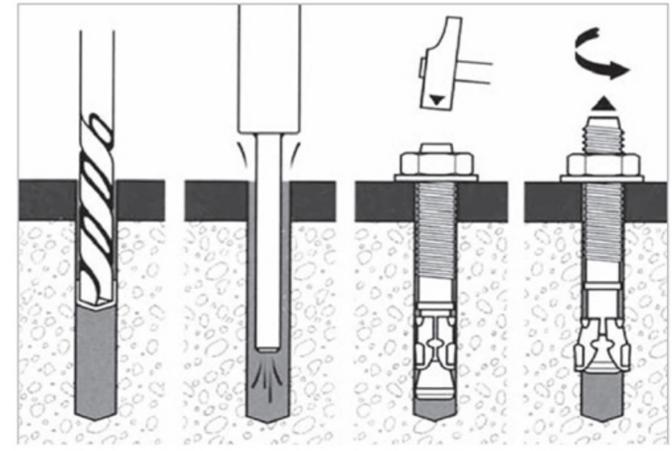
Material Bolt	Carbon Steel
Head Style	Hex Nut
Fixing Method	Through Fixture
Setting Method	Torque-Controlled
Anchoring Method	Expansion
Substrates	Concrete (non-cracked)



*Product Applications

Installation Instruction

1. Drill the correct diameter hole to the same diameter as the Fix3 stud anchor selected.
2. Remove debris from hole by blowing out with compressed air or hand held blow out pump.
3. Install the anchor in the hole with a hammer until washer seats on fixture.
4. Tighten bolt with a torque wrench to recommended assembly torque.



Pre-assembled anchor

APPLICATION

- Steel and timber framework and beams
- Lift guide rails
- Industrial doors and gates
- Brickwork support angles
- Storage systems

MATERIAL

- Bolt M8-M20: Cold formed NFA 35-053 / Zinc electroplates (5 µm)
- Sleeve: Cold formed, NFA 35-231
- Washer: NF E25 513
- Hexagonal nut: Steel strength grade 6 or 8, ISO 898-2

Technical data

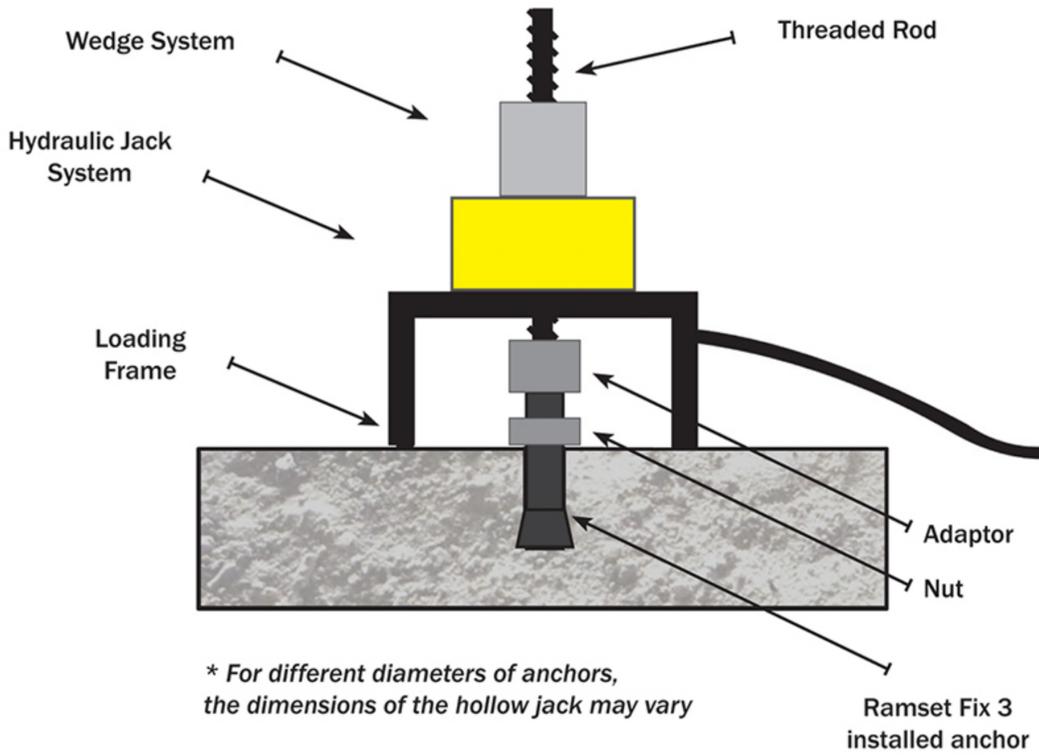
SPIT FIX3	Letter marking	Minimum anchor depth					Maximum anchor depth					Ø thread	Ø drill bit	Ø clearance	Total anchor length (mm)	Max. tighten torque (Nm)
		Min. anchor depth (mm)	Depth before expans (mm)	Max thick of part to be fixed (mm)	Drilling Depth (mm)	Min thick of base material (mm)	Max. anchor depth (mm)	Depth before expans (mm)	Max thick of part to be fixed (mm)	Drilling Depth (mm)	Min thick of base material (mm)					
		$h_{ef,min}$	h_{nom}	t_{fix}	h_1	h_{min}	$h_{ef,max}$	h_{nom}	t_{fix}	h_1	h_{min}	d	d_o	d_f	L	T_{inst}
M6x45/5*				5					-						45	
M6x55/15*		25,6	35	20	41	100	35	45	10	51	100	6	6	8	55	10
M6x85/45*				50					40						85	
M6x64 percée*				-					-						64	
M8x55/5	-			5					-						55	
M8x70/20-10	C			20					10						70	
M8x90/40-30	E			40					30						90	
M8x100/50-40	F	30	38	50	50	100	40	48	40	60	100	8	8	9	110	15
M8x115/65-55	G			65					55						115	
M8x130/80-70	H			80					70						130	
M8x160/110-100	J			110					100						160	
M10x65/5	-			5					-						65	
M10x75/15-5	C			15					5						75	
M10x85/25-15	D			25					15						85	
M10x95/36-26	E			36					26						95	
M10x110/50-40	F	40	50	50	60	100	50	60	40	70	100	10	10	12	110	30
M10x125/65-55	G			65					55						125	
M10x140/80-70	I			80					70						140	
M10x160/100-90	J			100					90						160	
M12x80/5	-			5					-						80	
M12x100/25-10	F			25					10						100	
M12x115/40-25	G			40					25						115	
M12x125/50-35	H			50					35						125	
M12x140/65-50	I	50	62	65	75	100	65	77	50	90	130	12	12	14	140	50
M12x160/85-70	J			85					70						160	
M12x180/105-90	L			105					90						180	
M12x220/145-130	O			145					130						220	
M12x290/215-200*	-			215					200						290	
M16x100/5	-			5					-						100	
M16x125/30-15	G			30					15						125	
M16x150/55-40	I			55					40						150	
M16x170/75-60	K	65	80	75	95	130	80	95	60	110	160	16	16	18	170	100
M16x185/90-75	L			90					75						185	
M16x235/140-125*	-			140					125						235	
M16x300/200*	-			200					178						300	
M20x125/10	-			10					-						125	
M20x165/50-25	J	75	93	50	110	150	100	118	25	135	200	20	20	22	165	160
M20x220/105-80	N			105					80						220	

* do not belongs to ETA

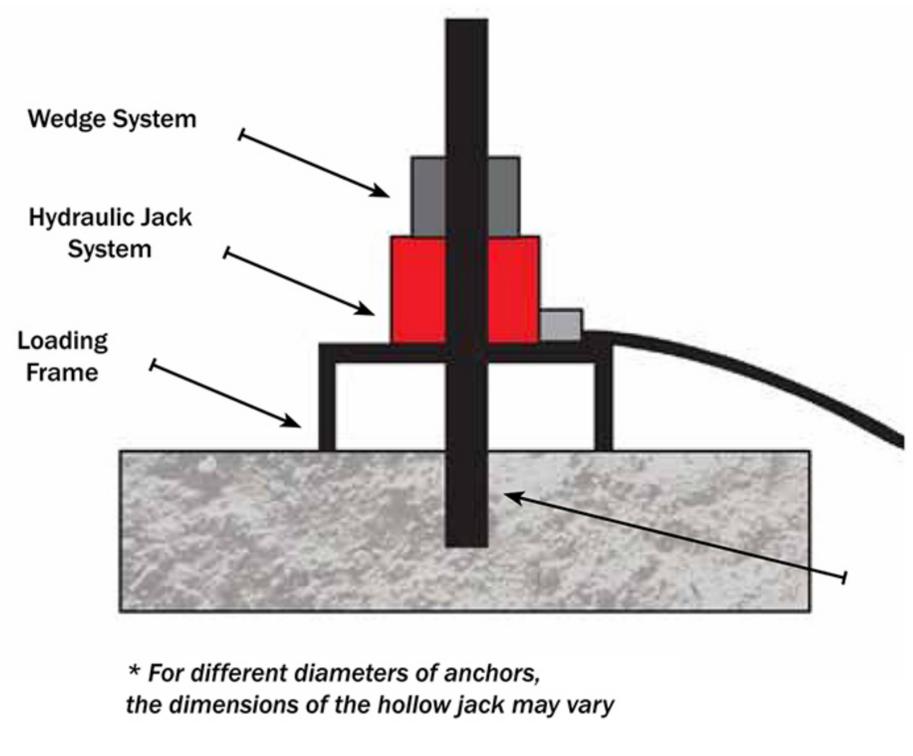
Anchor mechanical properties

		M6	M8	M10	M12	M16	M20
Cross-section above cone							
f_{uk} (N/mm ²)	Min. tensile strength	700	750	750	750	700	600
f_{yk} (N/mm ²)	Yield strength	580	600	600	600	570	570
A_s (mm ²)	Stressed cross-section	-	23,8	34,7	56,1	103,9	172
Threaded part							
f_{uk} (N/mm ²)	Min. tensile strength	600	650	650	650	600	580
f_{yk} (N/mm ²)	Yield strength	480	520	520	520	480	480
A_s (mm ²)	Stressed cross-section	20,1	36,6	58	84,3	157	245
W_{el} (mm ³)	Elastic section modulus	12,71	31,23	62,3	109,17	277,47	540,9
$M^0_{Rk,s}$ (Nm)	Characteristic bending moment	9	24	49	85	200	376
M (Nm)	Recommended bending moment	3,7	9,8	20,0	34,7	81,6	153,5

TENSILE TEST / TEST TARIK (AVAILABLE ON REQUEST)



Ramset™ FIX3



Ramset™ EpconG5

PROJECT REFERENCE





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