

IKA-GT 300ML & 380ML SPECIFICATION



Product Description

IKA - GT – EU approved. It is designed as a fast curing high strength resin fixing anchor for medium loads and is particularly suitable for Masonry. Applied in a single action this mortar will afford consistent, cost effective, high load, structural anchoring.

Key Features

- Use in solid concrete or brick applications (dry or wet conditions).
- Ideal for use in cavity brick (use with plastic/metal mesh sleeves to reduce waste).
- Non-flammable and non-hazardous.
- Crack and gap filling.
- Economical fixing resin.

Approvals



INSTYTUT TECHNIKI BUDOWLANEJ
Aprobacie Technicznej
ITB 0973/W
ITB-AT-15-6895:2011

ASSOCIATION

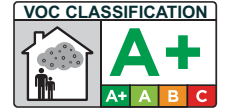


SOCOTEC QUALITÉ

563
CAZ 0833/2

IMPORTANT NOTE

Performance based on clean holes; HAMMER DRILLED - blown and then brushed with a stiff metal brush & blown again.



* Information on the emission of volatile substances in indoor air, with a risk of inhalation toxicity, on a scale ranging from class A+ (very low emissions) to C (high emissions).

CE 1404
2017
ETA CE
IKA-GT ETA-16/0907 1404-CPR-2832 ETAG 029 Use category c,wd
Size M8, M10, M12

Typical Gel and Curing Time*

*Full cure is achieved after 24 hours.

BASE MATERIAL TEMPERATURE (°C)	35	25	15	5	-5	-10**
TYPICAL GEL TIME (mins)	1,5	3	6	15	40	40
MIN. LOAD TIME (mins)	30	45	60	120	240	240

Typical Performance Data at Standard Embedment Depth

**Resin temperature must be at least 20°C

Size	Concrete, $f_{ck, cube} = 25N/mm^2$ (C20/25) 5.8 Grade Steel									SETTING DATA				
	Characteristic Resistance (kN)		Design Resistance (kN)		Recommended Load (kN)		Characteristic Edge Distance (mm)		Characteristic Spacing (mm)	Hole Diameter In Concrete	Hole Diameter In Fixture	Standard Embedment In Concrete	Recommended Torque (Nm)	Approx. No. of Holes per 300mm Cartridge
	Tension (N_{rk})	Shear (V_{rk})	Tension (N_{rd})	Shear (V_{rd})	Tension (N_{rec})	Shear (V_{rec})	Tension ($C_{cr,N}$)	Shear ($C_{cr,V}$)	(mm)	(mm)	(mm)	(mm)	Concrete/Brick	
M8	19.0	9.0	9.17	7.2	6.55	5.14	80	80	160	10	9	80	11 / 5	66
M10	24.85	15.0	11.50	12.0	8.22	8.57	100	90	200	12	11	90	22 / 17	48
M12	34.29	21.0	15.88	16.8	11.34	12.0	120	110	240	14	13	110	38 / 28	32
M16	49.28	39.0	22.81	31.2	16.30	22.9	160	125	320	18	17	125	95 / 75	20
M20	77.82	61.0	36.03	48.8	25.73	34.86	200	180	400	24	22	170	170 / -	6
M24	97.26	88.00	45.03	70.4	32.16	50.29	240	220	480	28	26	210	260 / -	5
M30	134.66	142.50	62.34	114.0	44.53	81.43	265	280	525	35	33	280	480 / -	1

Typical Ultimate Physical Properties

	N/mm ²	TEST METHOD	STORAGE / SHELF LIFE	IMPORTANT
COMPRESSIVE STRENGTH	41.8	(EN ISO 604) / (ASTM 695)	This product should be stored between +5°C & +25°C. The Shelf life of the product is 12 months from the manufacture date.	The information and data given is based on our own experience, research and testing and is believed to be reliable and accurate. However, as IKA Anchors cannot know the varied uses to which its products may be applied, or the methods of application used, no warranty as to the fitness or suitability of its products is given or implied. It is the users responsibility to determine suitability of use. For further information please contact our Technical Department.
FLEXURAL STRENGTH	14.1	(EN ISO 178) / (ASTM 790)		
FLEXURAL MODULUS	2589	"		
TENSILE STRENGTH	7.4	(EN ISO 527) / (ASTM 638)		
E MODULUS	4365	"		
VOC CONTENT	A+ Rating	"		

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Typical Performance in Hollow Substrate

SIZE	Characteristic Load (kN) Tension or Shear (F_{ec})	
	Brickwork 20.5 N/mm ²	Blockwork 7 N/mm ²
M8	1.7	0.8
M10	3.4	1.7
M12	4.8	2.7
M16	5.6	3.6

Reduction factors: Spacings and Edge Distances

Spacing Reduction Factor f_a								Edge Distance Reduction Factor f_r																		
Tensile Load / Shear Load								Tensile Load f_{rN}									Shear Load f_{rV}									
Spacing	\varnothing Anchors / Rebar (mm)							Edge Distance (mm)	\varnothing Anchors / Rebar (mm)									\varnothing Anchors / Rebar (mm)								
	8	10	12	16	20	24	30		8	10	12	16	20	24	30	(mm)	8	10	12	16	20	24	30			
40	0.64							40	0.64							40	0.25									
50	0.67	0.63						50	0.73	0.63						50	0.44	0.30								
60	0.70	0.65	0.63					60	0.82	0.70	0.63					60	0.63	0.48	0.30							
70	0.73	0.68	0.64					70	0.90	0.77	0.68					70	0.81	0.65	0.44							
80	0.76	0.70	0.66	0.63				80	1.00	0.84	0.74	0.63				80	1.00	0.83	0.58	0.40						
90	0.79	0.73	0.68	0.64				90		0.91	0.80	0.67				90		1.00	0.72	0.53						
100	0.82	0.75	0.70	0.65	0.63			100		1.00	0.86	0.72	0.63			100			0.86	0.67	0.35					
125	0.89	0.81	0.75	0.69	0.66	0.63		110			0.92	0.77	0.66			110			1.00	0.80	0.44					
150	0.96	0.88	0.80	0.73	0.69	0.65	0.63	120			1.00	0.81	0.70	0.64		125			1.00	0.58	0.35					
160	1.00	0.90	0.82	0.74	0.70	0.66	0.64	140				0.91	0.78	0.67	0.63	140				0.72	0.46	0.30				
175		0.94	0.85	0.76	0.72	0.68	0.65	160			1.00	0.85	0.73	0.66	160					0.91	0.62	0.35				
200		1.00	0.90	0.80	0.75	0.70	0.68	180				0.93	0.80	0.72	180				1.00	0.77	0.46					
225			0.95	0.84	0.78	0.73	0.70	200				1.00	0.86	0.78	200					1.00	0.92	0.57				
240			1.00	0.86	0.80	0.75	0.72	220					0.92	0.84	220						1.00	0.68				
250				0.87	0.81	0.76	0.73	240					1.00	0.90	240							0.78				
275				0.91	0.84	0.78	0.75	265						1.00	280								1.00			
280				0.92	0.85	0.79	0.76																			
300				0.95	0.88	0.81	0.78																			
320				1.00	0.90	0.83	0.80																			
350					0.94	0.86	0.83																			
400					1.00	0.92	0.88																			
440						0.96	0.92																			
480						1.00	0.96																			
500							0.98																			
525							1.00																			

Material Properties

Characteristic ($V_{rk,s}$) & Design ($V_{rd,s}$) Shear Loads for Various Stud Grades + Rebar

Stud Diameter (mm)	Stud Grade 5.8		Stud Grade 8.8		Stud Grade 10.9		Stud Grade A4-70		Stud Grade A4-80		Rebar Diameter (mm)	BSt 500 Rebar	
	$V_{rk,s}$ (kN)	$V_{rd,s}$ (kN)	$V_{rk,s}$ (kN)	$V_{rd,s}$ (kN)	$V_{rk,s}$ (kN)	$V_{rd,s}$ (kN)	$V_{rk,s}$ (kN)	$V_{rd,s}$ (kN)	$V_{rk,s}$ (kN)	$V_{rd,s}$ (kN)		$V_{rk,s}$ (kN)	$V_{rd,s}$ (kN)
M8	9.5	7.6	14.6	11.7	19.0	15.2	12.8	8.2	14.6	9.4	8	16.6	11.1
M10	15.1	12.1	23.2	18.6	30.2	24.1	20.3	13.0	23.2	14.9	10	25.9	17.3
M12	21.9	17.5	33.7	27.0	43.8	35.1	29.5	18.9	33.7	21.6	12	37.3	24.9
M16	40.8	32.7	62.8	50.2	81.6	65.3	55.0	32.5	62.8	40.3	14	50.8	33.9
M20	63.7	51.0	98.0	78.4	127.4	101.9	85.8	55.0	98.0	62.8	16	66.4	44.3
M24	91.8	73.4	141.2	113.0	183.6	146.8	123.6	79.2	141.2	90.5	20	103.9	69.3
M30	142.5	114.0	207.6	166.1	269.9	215.9	129.8	64.9	207.6	103.8	25	162.0	108.0
											32	265.1	176.7
											40	414.6	276.4

Notes:

All grades shown for information. M30 for A4-70 tensile strength of 500N/mm², instead of 700N/mm².

Safety Factor is 1.25 for all carbon steel. Safety Factor is 1.56 for stainless steel, up to M24, M30 is 2.0. Safety Factor is 1.5 for BSt 500 rebar.