



Ramset™

Brick & Block Anchoring



2009



Ramset™
www.ramset.co.nz

Brick and Block Anchoring



Function

ChemSet Injection 101 is a medium duty, peroxide initiated injection anchor.

Features and Benefits

Fast installation:

- Load in 1 hour (at 20°C).

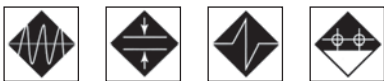
Versatile:

- Suitable for anchoring into pre-manufactured masonry units.

Principal Applications into Brick and Block

- Installing wall mounted signs, handrails, and gates.

Performance Related



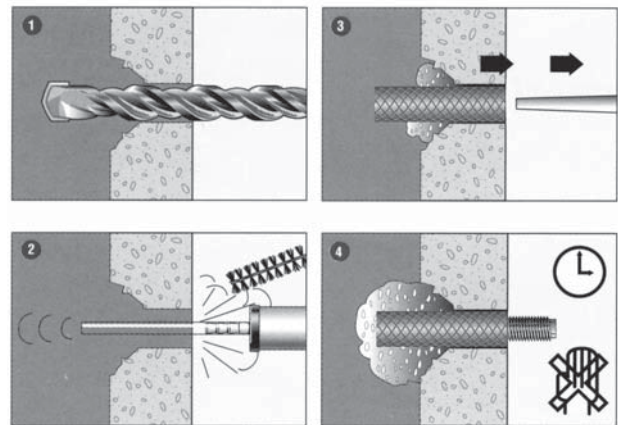
Material Specification



Installation Related



Installation



1. Drill recommended diameter and depth hole.
2. Clean hole with hole cleaning brush. Remove all debris using hole blower. Hole may be damp but no water present.
3. Insert mixing nozzle into sleeve or sieve. Fill to ¾ the sleeve / sieve depth slowly, ensuring no air pockets form. Insert Ramset ChemSet Anchor Stud to bottom of hole while turning.
4. ChemSet Injection to cure as per setting times. Attach fixture.

Installation temperature limits:

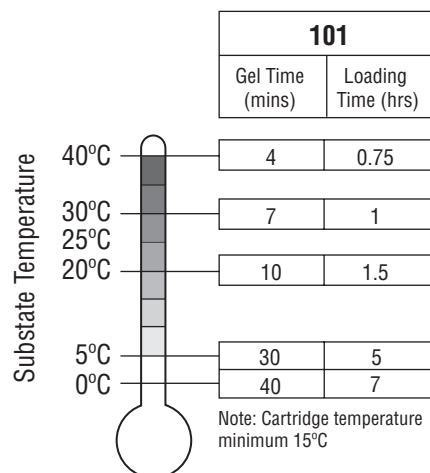
- Substrate: 0°C to 43°C
- Mortar: 15°C to 30°C

Load should not be applied to anchor until the chemical has sufficiently cured as specified in the following diagrams.

Service temperature limits:

- 10°C to 43°C.

Setting Times



Brick and Block Anchoring

These anchors are not recommended for structure critical applications and are typically used for simple fixing and finishing applications. Their capacity information is therefore presented in simple Working Load Limit format.

Installation and Performance Details: Using Chemset Anchor Studs (p23)

Anchor size, d _a (mm)	Substrate	Sleeve/Sieve Type	Installation details				Performance (kN)	
			Drilled hole Ø, d _h (mm)	Fixture hole Ø, d _f (mm)	Anchor effective depth, h (mm)	Tightening Torque, T _r (Nm)	Solid Brick	
							Shear V _a (kN)	Tension N _a (kN)
M8	Solid Clay Brick	-	10	10	80	10z	4.4	1.4
M10			12	12	85	20	4.8	1.5
M12			14	15	85	40	5.2	1.6
M16			18	19	85	95	5.2	1.7

Anchor size, d _a (mm)	Substrate	Installation details				Performance (kN)					
		Drilled hole Ø, d _h (mm)	Fixture hole Ø, d _f (mm)	Anchor effective depth, h (mm)	Tightening Torque, T _r (Nm)	3 Hole Brick		10 Hole Brick		Concrete Block	
						Shear	Tension	Shear	Tension	Shear	Tension
M8	3 Hole Brick, 10 Hole Brick or Concrete Block	12	10	64	10	3.8	2.5	3.0	1.0	1.8	1.8
M10		16	12		20	4.6	2.5	4.6	1.0	2.0	1.8
M12		16	15		40	5.0	2.5	5.0	1.0	2.0	1.8
M16		22	19		95	5.0	2.5	5.0	1.0	2.0	1.8

* For details on Working Load Limit and Reduced Characteristic capacities refer page 3.

Working Load Limit

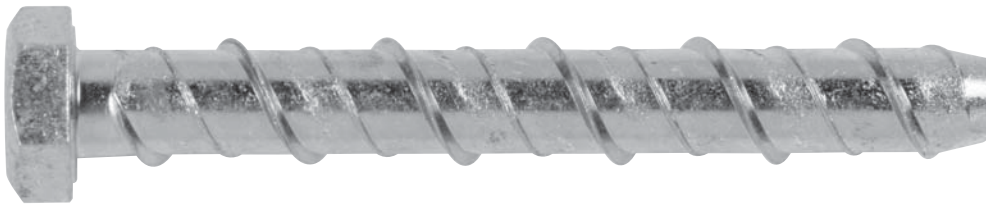
Description and Part Numbers

Description	Cartridge Size	Part No.
ChemSet 101 Cartridge	380 ml	C101C
Chemset Kit	2 x 380 ml	ISKP
Mixer Nozzle for 100 Series	-	ISNP
Applicator Tool	-	CUA
12mm Mesh Sleeve	-	ISM12
16mm Mesh Sleeve	-	ISM16

Description and Part Numbers - Accessories

Description		Part No.
Cleaning Brush	10-14mm Hole	HCBT13
Cleaning Brush	18-22mm Hole	HCBT20
Cleaning Brush	22-26mm Hole	HCBT26
Hole Cleaning Pump / Blower	-	S065990

Brick and Block Anchoring



Function

The Anka Screw Anchor is a medium duty, rotation setting thread forming anchor.

Features and Benefits

Fast and easy to install:

- Simply screws into hole.

Fast and easy to remove:

- Screws out leaving an empty hole with no protruding metal parts to grind off.

Close to edge and for close anchor spacing:

- Does not expand and burst brick and block.

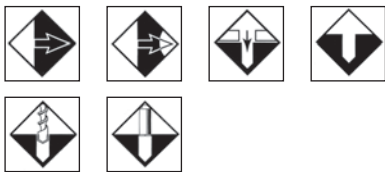
Performance Related



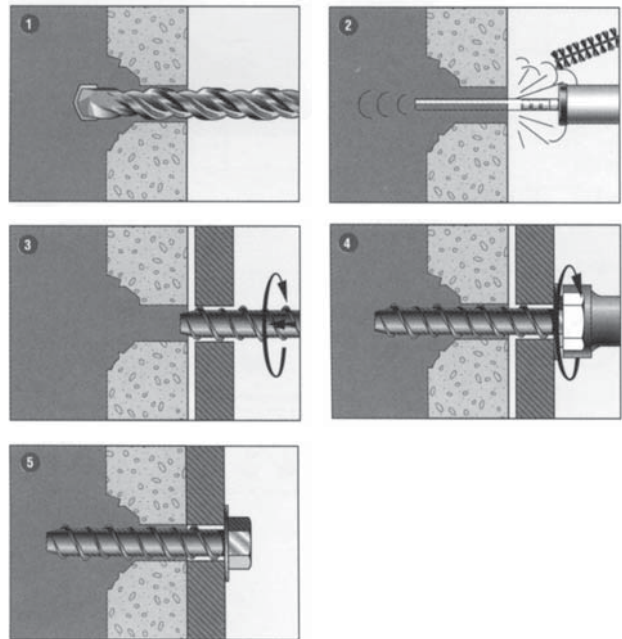
Material



Installation Related



Installation



1. Drill hole to correct diameter and depth.
2. Clean thoroughly with brush. Remove debris by way of vacuum or hand pump, compressed air etc.
3. Using a socket wrench, screw the AnkaScrew into the hole using slight pressure until the self tapping action starts.
4. Tighten the AnkaScrew. If resistance is experienced when tightening, unscrew anchor one turn and re-tighten. Ensure not to over tighten.
- 5 For optimum performance, a torque wrench should be used.

Principal Application into Brick and Block

- Wall mounted pipe brackets
- Gate hinges
- Formwork
- Temporary fixings

Brick and Block Anchoring

These anchors are not recommended for structure critical applications and are typically used for simple fixing and finishing applications. Their capacity information is therefore presented in simple Working Load Limit format.

Installation and Performance Details

Anchor size, d_h (mm)	Installation details				Performance Limit (kN)					
	Drilled hole \varnothing, d_h (mm)	Fixture hole \varnothing, d_f (mm)	Anchor effective depth, h (mm)	Tightening Torque, T_r , (Nm)	3 Hole Brick		10 Hole Brick		Concrete Block	
					Shear V_a (kN)	Tension N_a (kN)	Shear V_a (kN)	Tension N_a (kN)	Shear V_a (kN)	Tension N_a (kN)
M6	6	8	30	10	3.0	2.4	1.8	0.60	2.1	0.90
M8	8	10	40	10	3.8	2.7	2.3	0.65	2.1	1.00
M10	10	12	50	15	4.2	2.8	2.5	0.65	2.1	1.00
M12	12	15	60	15	4.2	3.0	2.5	0.70	2.1	1.15
Working Load Limit										

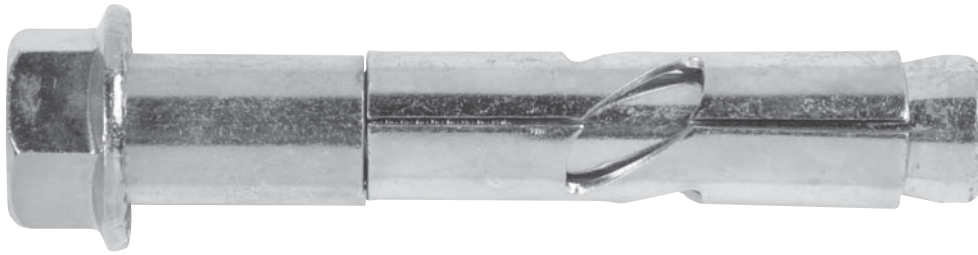
* For shear loads acting towards an edge or where these minimum dimensions are not achievable, please use the simplified strength limit state design process to verify capacity.

* For details on Working Load Limit and Reduced Characteristic capacities refer page 3.

Description and Part Numbers

Anchor size, d_h	Length, L (mm)	Part No.
M6	50	AS06050H
	75	AS06075H
	100	AS06100H
M8	60	AS08060H
	75	AS08075H
	100	AS08100H
M10	60	AS10060H
	75	AS10075H
	100	AS10100H
	150	AS10150H
M12	75	AS12075H
	100	AS12100H
	150	AS12150H

Brick and Block Anchoring



Function

The DynaBolt Anchor Hex Bolt is a medium duty, torque setting expansion anchor.

Features and Benefits

Ideal for hollow substrates:

- Cone nut pulls up in cavity to clamp fixture to substrate.

Neat to finish:

- Low profile hex head.

Fast installation:

- Through fixing eliminates marking out and repositioning of fixture.

Convenient to remove:

- No metal parts protrude from hole eliminating grinding.

Economical Zinc Plated or superior corrosion resistant AISI 316 Stainless Steel.

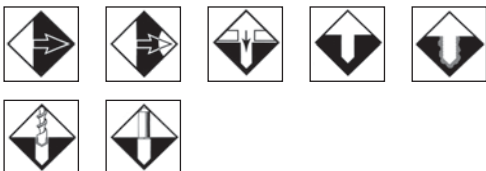
Performance Related



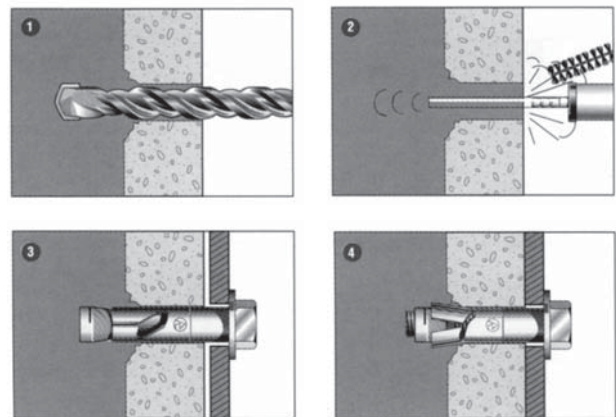
Material



Installation Related



Installation



1. Drill hole to correct diameter and depth.
2. Clean thoroughly with brush. Remove debris by way of vacuum or hand pump, compressed air etc.
3. Insert Dynabolt Anchor Hex Bolt through fixture, tap lightly with hammer until washer contacts fixture.
4. Tighten Dynabolt Anchor Hex Bolt to specified assembly torque using torque wrench or impact wrench (rattle gun).

Principal Application into Brick and Block

- Electrical junction boxes
- Wall mounted pipe brackets
- Installing wall mounted signs, handrails and gates.
- Roller door guide rails

Brick and Block Anchoring

These anchors are not recommended for structure critical applications and are typically used for simple fixing and finishing applications. Their capacity information is therefore presented in simple Working Load Limit format.

Installation and Working Load Limit Performance Details

Anchor size, d_b (mm)	Installation details				Performance (kN)							
	Drilled hole \varnothing , d_b (mm)	Fixture hole \varnothing , d_f (mm)	Anchor effective depth, h (mm)	Tightening Torque, T_t (Nm)	Solid Brick		3 Hole Brick		10 Hole Brick		Concrete Block	
					Shear, V_a (kN)	Tension, N_a	Shear, V_a (kN)	Tension, N_a	Shear, V_a (kN)	Tension, N_a	Shear, V_a (kN)	Tension, N_a
M8	8	10	35	10	3.9	3.1	2.9	3.9	2.0	0.83	1.4	1.00
M10	10	12	40	15	4.4	4.6	3.4	4.1	2.3	0.87	1.6	1.00
M12	12	15	40	15	4.4	4.6	3.8	4.1	3.1	0.94	2.1	1.00

* For shear loads acting towards an edge or where these minimum dimensions are not achievable, please use the simplified strength limit state design process to verify capacity.

* For details on Working Load Limit and Reduced Characteristic capacities refer page 3.

Working Load Limit

Description and Part Numbers

Anchor size, d_b	Length, L (mm)	Part No.	
		Zn	S/S
M8	45	DP08045H	
	70	DP08070H	DP08070HSS
M10	55	DP10055H	-
	80	DP10080H	DP10080HSS
M12	65	DP12065H	-
	75	DP12075H	DP12075HSS
	105	DP12105H	-

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