Ramset™

OPTIMUM ANCHORING SOLUTIONS™



NEW

ChemSet™ Epcon™ G5™ XTREM™

BROCHURE

AUSTRALIAN MADE

BUILT STRONG.
HOLDS EVERYWHERE.™

ChemSet™ EPCON™ G5 Xtrem™

CHEMICAL INJECTION - NON-CRACKED & CRACKED CONCRETE

GENERAL INFORMATION

Performance Related	Installation Related

Product

ChemSet™ EPCON™ G5 Xtrem™ is a heavy duty pure Epoxy for anchoring threaded studs and reinforcing bar into cracked and uncracked concrete.

Compliance

European Technical Assessment - ETA-25/0648
Design according to:

- ETA-25/0646 -comply to EAD 332402-00-0601 (TR069)
- ETA-25/0647 -comply to EAD 330087-01-0601 (PIR)
- ETA-25/0648 -comply to EAD 330499-02-0601 (Bond)
- CSTB Fire Test -comply to EN 1992-1-2

Use Ramset™ iExpert Anchor Software for optimised calculation or where a greater range of anchor layout detail is needed.

Benefits, Advantages and Features

- 120 years working Life

Greater productivity:

- Anchors in dry, damp, wet or flooded holes

Greater security:

- Strong bond
- Rated for sustained loading

Versatile:

- Anchors in carbide drilled and diamond drilled holes*
- Cold and temperate climates

Greater safety:

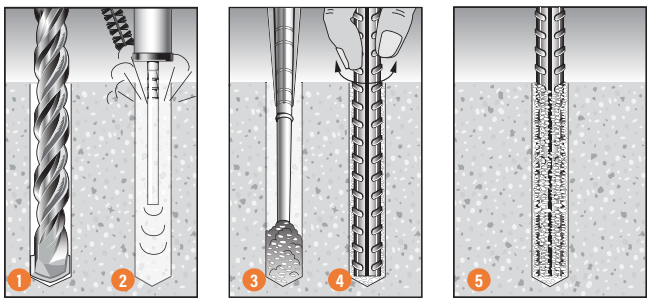
- Low odour
- VOC Compliant



Principal Applications

- Threaded Studs
- Starter Bars
- Threaded Inserts
- Over-head installation
- Steel Columns
- Hand Rails
- Road Stitching

Installation



1. Drill recommended diameter and depth hole.
2. **Important:** For hammer drilling technique clean dust and debris from hole with stiff wire brush and blower in the following sequence: blow x 2, brush x 2, blow x 2, brush x 2, blow x 2. For diamond drilling technique refer to **ETA-25/0648**
3. Screw mixing nozzle onto cartridge and dispense adhesive to waste until colour is orange. Insert mixing nozzle to bottom of hole.
   Fill hole to 2/3 the hole depth slowly, ensuring no air pockets form.
4. Insert **Ramset**™ ChemSet™ Anchor Stud/rebar to bottom of hole while turning.
5. Allow Chemset™ EPCON™ G5 Xtrem™ to cure as per setting times.

Installation & Substrate Temperature Range

Minimum	Maximum
5°C	40°C

Service Temperature Limits

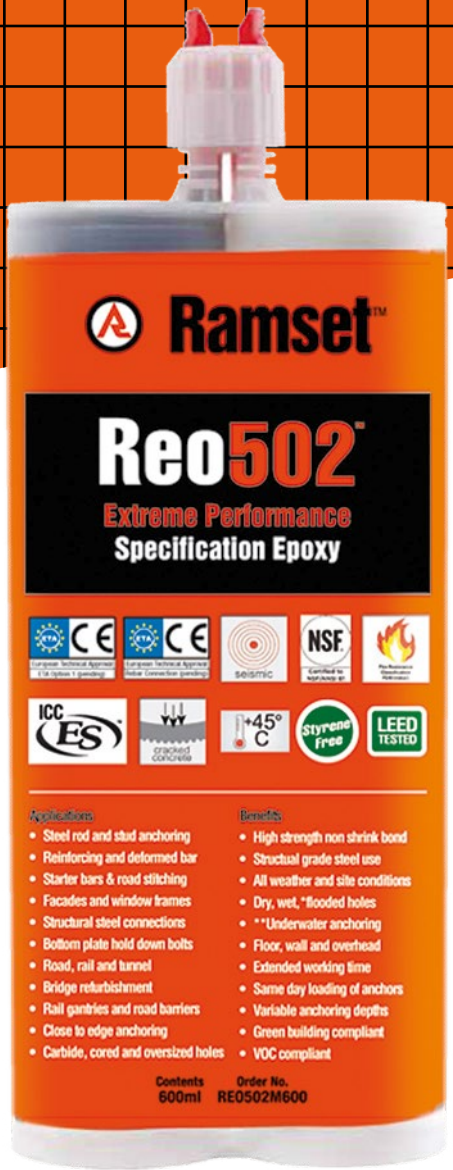
T1: -40°C to +40°C
T2: -40°C to +60°C
T3: -40°C to +75°C

Setting Times

Temperature of base material	Gel Time	Curing time in dry concrete	Curing time in wet and flooded concrete
5°C	75 min	30h	60 h
10°C	45 min	22h	44 h
15°C	35 min	14h	28 h
20°C	22 min	7h	14 h
25°C	14 min	5h	10 h
30°C	8 min	4h	8 h
35°C	6 min	3h	6h
40°C	4 min	2h 45min	5h 30min

Ramset™

OPTIMUM ANCHORING SOLUTIONS™



ChemSet™ Reo502™

Heavy Duty Epoxy Anchoring

ChemSet™ Reo502™

Heavy Duty Epoxy Anchoring

PERFORMANCE RELATED	MATERIAL SPECIFICATION	INSTALLATION RELATED
	Zn GAL A4 316	

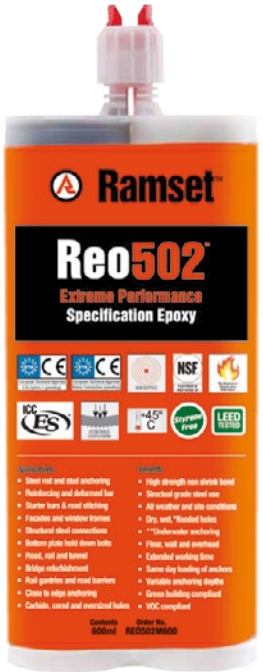
GENERAL INFORMATION

Reo502 - Heavy Duty Epoxy Anchoring

You don't have to waste your valuable time waiting for longer cure times or waste money disposing of dried up nozzles. Reo 502 is the solution to your problem.

The epoxy resin and hardener are thoroughly and evenly mixed as they are dlspensed from the dual cartridge through a static mlxlng nozzle, directly into the anchor hole.

With an extended working time and a full cure within 3 hours, your crew can keep working more efficiently, not waiting, saving you time and money.



Advantages

HIGH PERFORMANCE EPOXY :	Shallower embedment depth required
FIRE RESISTANT STRUCTURES :	Tested up to 4 hours FRP according to Eurocode 2, with standardised fire curve (ISO 834)
FAST CURE FORMULA :	3.hour cure time at 400C for same day loading of anchors
COST SAVINGS :	Less delay of work, Less nozzles used
HIGH STRENGTH NON SHRINK :	Suitable for cored and oversized holes
VOC COMPLIANT :	Virtually odorless, can be used Indoors, LEED Tested, Styrene free
WATER INSENSITIVITY :	Works In wet, flooded holes and underwater appllcatlons

Specifications

EPOXY CHEMICAL :

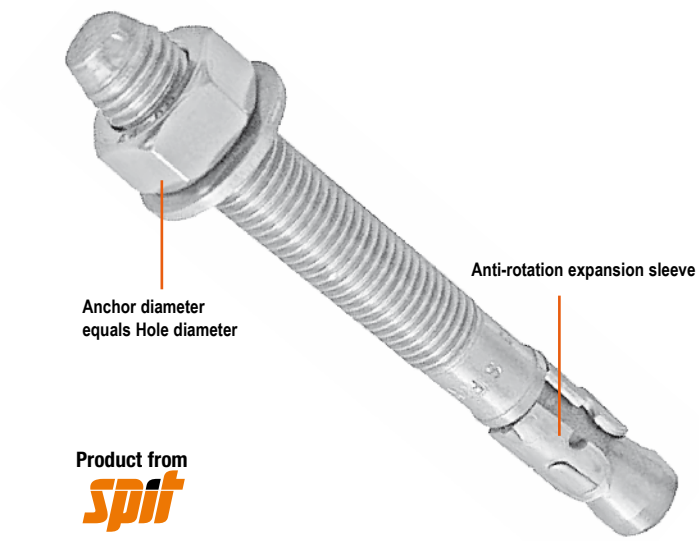
- Two component, 100% solids (contalnlng no solvents), nonsag paste, Insensltlve to moisture, grey In colour
- Mixed Density: 1.5g/cm^2 (ASTM D 1875@+200˚C)
- Hardness > Shore D80
- compressive strength, ASTM D695: 95 MPa at 7 days
- Heat Distortion Temperature: Approx 80˚C
- Water solubility: None
- Dielectrlc constant 3.96

PACKAGING :

- Disposable, self-contained 600ml cartridge system capable of despenslng both epoxy components in the proper mixing ratio.
- Epoxy components dispensed through a static mlxlng nozzle that thoroughly mixes the material and places the epoxy at the base of tho pre-drllled hole.
- Cartridge markings: Include manufacturer's name, batch number and best-used-by date, mix ratio by volume, ANSI hazard classification, and appropriate ANSI handling precautions.

FIX Z XTREM Stud Anchors for Cracked and Non-cracked Concrete

Ramset™



Approvals

ETA Option 1
no 04/0010
(FIX Z A4)

TR 020

C1/C2
Seismic approval
FIX Z XTREM

Performance Related

Dynamic Load | Pull down | Cracked Concrete | Fire Resistant | Seismic

Material Specification

Zn Zinc Plated | A4 316 Stainless Steel

Description

The FIX Z XTREM Stud Anchor is a true-to-size, heavy duty, torque controlled expansion anchor, for permanent anchoring into standard and hard concrete. Designed for heavy duty anchoring in cracked and non-cracked concrete. Suitable for seismic and fire environments.

Features and Benefits

- 3 legs clip for a better expansion
- 6 lugs for a better fixing in concrete
- Improved efficiency with fewer hammer blows and turns for installation
- "Pull down" capabilities for secure fixings

Substrates

- Concrete (cracked and non-cracked), Solid Stone (applicable with care)

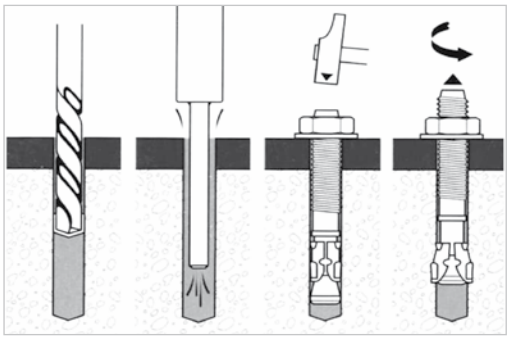
Installation

1. Drill the correct diameter hole to the same diameter as the FIX Z XTREM 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.

Typical Applications

- Structural beams and columns
- Load bearing zones
- Cable trays
- Overhead piping
- Air condition ducts
- Securing of machines and equipment
- Tie back brackets for façade





FIX Z XTREM - Zinc Plated - Recommended Working Loads in 40N/mm² non-cracked Concrete

Thread Ø	Drill Depth (mm)	Torque (Nm)	Shear Load (kN)	Tension Load (kN)
M8	60 (-)	20	9.1	15.8
M10	75 (55)	45	12.6	19.8
M12	80 (70)	60	18.1	25.8
M16	110 (90)	110	36.0	43.7
M20	130 (-)	160	40.7	66.1

Remark:
1. All parameters refer to ETA-15/0388
2. Resistance shown above refer to steel resistance
3. Drill depth in legend "()" refer to reduced embedment

FIX Z XTREM Stud Anchors for Cracked and Non-cracked Concrete

Ramset™

FIX Z XTREM Stud Anchors - Zinc Plated



Part No.	Description	Thread Ø	Max Fixture Thickness (mm)*	Fixture Clearance Hole Ø (mm)	Overall Anchor Length (mm)	Drilled Hole Ø (mm)	Min Hole Depth (mm)*	Order Qty	Seismic Approval
057763	M8x65/5	M8	5	9	65	8	65	100	C1
057764	M8x75/15	M8	15	9	75	8	65	100	C1
057765	M8x90/30	M8	30	9	90	8	65	50	C1
057766	M8x120/60	M8	60	9	120	8	65	50	C1
057768	M10x85/25-5	M10	25	12	85	10	55	50	C1/C2
057769	M10x90/30-10	M10	30	12	90	10	55	50	C1/C2
057771	M10x120/60-40	M10	60	12	120	10	55	25	C1/C2
057773	M10x160/100-80	M10	100	12	160	10	55	25	C1/C2
057775	M12x105/30-10	M12	30	14	105	12	70	25	C1/C2
057776	M12x115/40-20	M12	40	14	115	12	70	25	C1/C2
057777	M12x135/60-40	M12	60	14	135	12	70	25	C1/C2
057779	M12x180/105-85	M12	105	14	180	12	70	25	C1/C2
057781	M16x145/45-25	M16	45	18	145	16	90	10	C1/C2
057782	M16x170/70-50	M16	70	18	170	16	90	10	C1/C2
057783	M16x180/80-60	M16	80	18	180	16	90	10	C1/C2
057785	M20x170/30	M20	30	22	170	20	130	10	C1/C2
057787	M20x220/80	M20	80	22	220	20	130	10	C1/C2

* Data based on minimum anchor depth

FIX Z XTREM A4 Stainless Steel - Recommended Working Loads in 40N/mm² non-cracked Concrete

Thread Ø	Drill Depth (mm)	Torque (Nm)	Shear Load (kN)	Tension Load (kN)
M8	65 (42)	20	8.2	9.2
M10	75 (55)	45	12.7	20.5
M12	90 (70)	60	19.2	20.7
M16	110 (90)	110	29.7	43.2

Remark:
1. All parameters refer to ETA-15/0388
2. Resistance shown above refer to steel resistance
3. Drill depth in legend "()" refer to reduced embedment

FIX Z XTREM A4 Stud Anchors - Stainless Steel

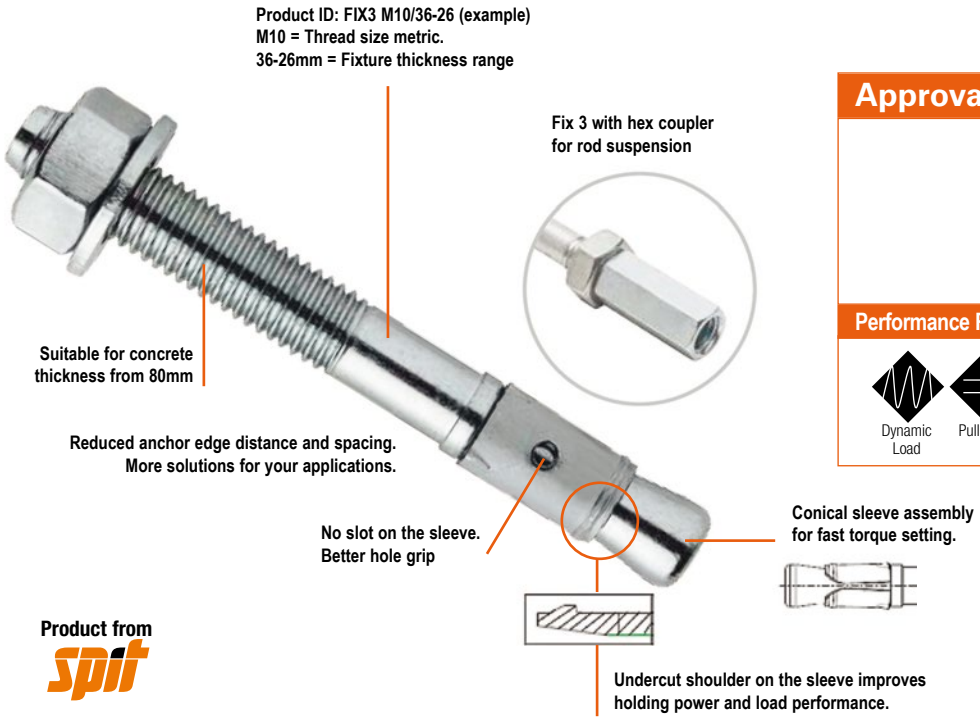


Part No.	Description	Thread Ø	Max Fixture Thickness (mm)*	Fixture Clearance Hole Ø (mm)	Overall Anchor Length (mm)	Drilled Hole Ø (mm)	Min Hole Depth (mm)*	Order Qty
058616	M8x55/5 A4	M8	5	9	55	8	52	100
058617	M8x70/20-7 A4	M8	20	9	70	8	52	100
058618	M8x90/40-27 A4	M8	40	9	90	8	52	100
058619	M10x70/10	M10	10	12	70	10	55	50
058620	M10x95/35-15	M10	35	12	95	10	55	50
058621	M10x105/45-25	M10	45	12	105	10	55	50
058622	M10x130/70-50	M10	70	14	130	12	55	25
058623	M12x95/20	M12	20	14	95	12	70	25
058624	M12x110/35-15	M12	35	14	110	12	70	25
058625	M12x120/45-25	M12	45	14	120	12	70	25
058626	M12x140/65-45	M12	65	18	140	16	70	25
058627	M16x120/20	M16	20	18	120	16	90	20
058628	M16x140/40-20	M16	40	18	140	16	90	10

* Data based on minimum anchor depth

Fix 3™ Multi Purpose Heavy Duty Stud Anchor

Ramset™



Product from spit

Approvals

ETA Option 7
no.13/0005

Performance Related	Material Specification
Dynamic Load, Pull down, Fire Resistant	Zn Zinc Plated

Description

The Fix 3™ Stud Anchor is a true-to-size, heavy duty, multi purpose expansion anchor, for permanent anchoring into concrete. Designed for heavy duty anchoring in non cracked concrete where reduced edge distance and anchor spacing is required. Undercut shoulder on the sleeve improves hole grip and increases load performance.

Features and Benefits

- The Fix 3™ Stud Anchor diameter equals the required hole diameter providing maximum shear capacity for hole size and making drill bit selection simple. Anchor design provides superior strength and reliability.
- The anchor design ensures maximum expansion of the sleeve and pull-down on the fixture. These actions are both further assisted by the application of load.
- The anti-rotation expansion sleeve is designed to grip the sides of the hole, preventing anchor rotation during installation.
- Use threaded couplers where rod suspension applications are required.
- Suitable for installation in concrete from 80mm thick such as pre-fabricated concrete panels.

Substrates

- Concrete

Typical Applications

- Installing curtain walls, balustrades & barriers
- Anchoring elevator guide rails
- Anchoring structural steel columns/beams
- Stadium seating & Pallet racking
- Overhead suspension & Anchoring

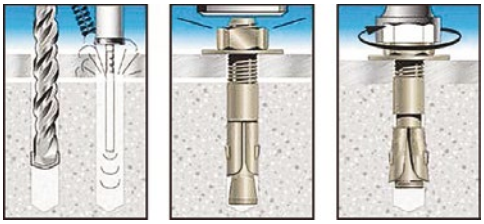


Fix 3™ Multi Purpose Heavy Duty Stud Anchor

Ramset™

Installation

1. Drill a hole to the recommended diameter and depth using the fixture as a template. Clean the hole thoroughly with a hole cleaning brush. Remove the debris with a hand pump, compressed air, or vacuum.
2. Insert the anchor through the fixture and drive with a hammer until the washer contacts the fixture.
3. Tighten the nut with a torque wrench to the specified assembly torque.



Fix 3™ Zn Plated - Recommended Working Loads in 40N/mm² non-cracked Concrete

Thread Ø	Drill Depth (mm)	Tightening Torque (Nm)	Shear Load (kN)	Tension Load (kN)
M6	*51(41)	*10	*2.4	*2.4
M8	60(50)	15	8.0	11.9
M10	70 (60)	30	11.0	17.3
M12	90 (75)	50	21.9	28.1
M16	110 (95)	100	29.2	49.5
M20	130 (-)	160	40.7	66.1

Remark:
1. All parameters refer to ETA-13/0005
2. Resistance shown above refer to steel resistance
3. Drill depth in legend "()" refer to reduced embedment
4. Legend * refer to Manufacturer test data for Recommended Working Resistance.

Fix 3™ Stud Anchor - Hex Nut - Zinc Plated



Part No	Description	Thread Ø	Max Fixture* Thickness (mm)	Fixture Clearance Hole Ø (mm)	Overall Anchor Length (mm)	Drilled Hole Ø (mm)	Min Hole Depth (mm)	Order Qty
057450	M8x55/5	M8	5	9	55	8	50	100
057451	M8x70/20-10	M8	20	9	70	8	50	100
057452	M8x90/40-30	M8	40	9	90	8	50	50
057455	M8x130/80-70	M8	80	9	130	8	50	50
057461	M10x75/15-5	M10	15	12	75	10	60	50
057463	M10x95/36-26	M10	36	12	95	10	60	50
057465	M10x125/65-55	M10	65	12	125	10	60	25
057467	M10x160/100-90	M10	100	12	160	10	60	25
057470	M12x80/5	M12	5	14	80	12	75	25
057471	M12x100/25-10	M12	25	14	100	12	75	25
057472	M12x115/40-25	M12	40	14	115	12	75	25
057474	M12x140/65-50	M12	65	14	140	12	75	25
057477	M12x220/145-30	M12	145	14	220	12	75	20
057480	M16x100/5	M16	5	18	100	16	95	20
057481	M16x125/30-15	M16	30	18	125	16	95	20
057482	M16x150/55-40	M16	55	18	150	16	95	10
057483	M16x170/75-60	M16	75	18	170	16	95	10
057484	M16x185/90-75	M16	90	18	185	16	95	10
057490	M20x150/10	M20	10	22	150	20	130	10
057491	M20x170/30	M20	30	22	170	20	130	10
057492	M20x220/80	M20	80	22	220	20	130	10

* Data based on minimum anchor depth

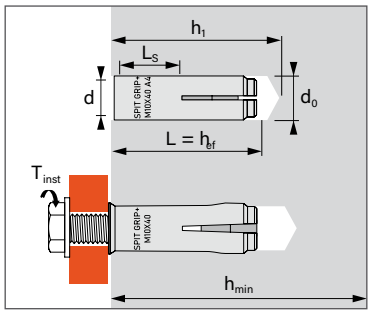
For hot-dip galvanized stud anchor, please consult Techical Department for anchor proposal.

Grip/Drop In Anchor



ETA - 21/0176

Deformation-controlled expansion female anchor
for use in cracked and non-cracked concrete and hollow concrete slab



TECHNICAL DATA

Dia (mm)	Drill Depth (mm)	Torque (Nm)	Shear Resistance (kN)	Tensile Resistance (kN)
M6X30	32	5	3.0	5.1
M8X30	33	10	5.5	9.2
M10X40	43	22	8.7	14.5
M12X50	54	36	12.6	21.1
M16X65	70	80	23.5	39.3

Remark:
1. All parameters refer to ETA-05/0053
2. Resistance shown above refer to steel resistance grade 5.6

CHARACTERISTICS



Vds CEA 4001
M8 - M16

TECHNICAL DATA

Dia (mm)	Drill Depth (mm)	Torque (Nm)	Shear Resistance (kN)	Tensile Resistance (kN)
M6X30 A4	30	5	4.5	7.5
M8X30 A4	30	8	6.8	12.5
M10X40 A4	40	15	8.6	15.7
M12X50 A4	50	35	16.1	26.8
M16X65 A4	65	60	26.9	44.8

Remark:
1. All parameters refer to ETA-06/0268
2. Resistance shown above refer to steel resistance A4-70)

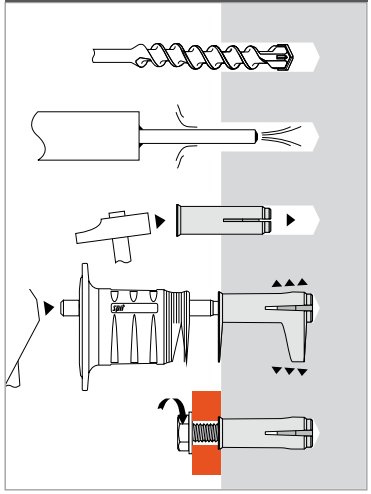
APPLICATION

- Ventilation ducts
- Suspended ceilings
- Cable trays
- Sprinkler system

ANCHOR MECHANICAL PROPERTIES

DIMENSIONS		M6	M8	M10	M12	M16
Zinc coated steel						
$M^0_{Rk,s}$ [Nm]	Characteristic bending moment					
	(grade 4.6/4.8)	6,1	15,0	29,9	52,4	133,3
	(grade 5.6/5.8)	7,6	18,8	37,4	65,5	166,6
	(grade 6.8)	9,2	22,5	44,9	78,7	199,9
	(grade 8.8)	12,2	30.0	59,9	104,9	266,6
Stainless steel A4						
$M^0_{Rk,s}$ [Nm]	Characteristic bending moment					
	(grade A4-50)	7,6	18,8	37,4	65,5	166,6
	(grade A4-70)	10,6	26,3	52,4	91,8	233,1
	(grade A4-80)	12,2	30.0	59,9	104,9	266,6

INSTALLATION

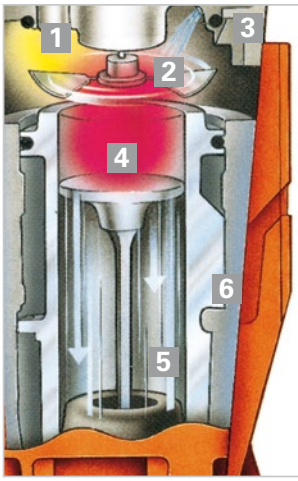


Fixing Technology Gas Technology system

Ramset™



Gas Technology - How it works



1. Spark Plug
2. Fan Motor
3. Fuel Port
4. Combustion Chamber
5. Piston Assembly
6. Cylinder

With its own internal combustion engine, Ramset™ Gas Technology fastens cable management, wiring accessories and partitioning track much faster than any other system!

At the heart of Ramset™ Gas Technology is the patented linear combustion engine. With its steel piston rings and precision-machined combustion chamber, Ramset™ Gas Technology drives fasteners 6 times faster then traditional explosive power actuated tool system.

When used with PULSA fuel cells and Ramset approved fasteners, European Safety Standard EN 792-13 can be met to ensure operators safety.

How to select a Ramset™ Gas Technology Fixing to directly fasten an object for permanent installation

Fixing to concrete

As the fixing enters the concrete, extreme pressure and heat are created. This creates a bond that provides high loading strength in concrete.

Edge distance

Do not fix closer than 60mm from the edge of concrete. If the concrete cracks, the fixing may not hold.

Recommended minimum fixing spacing

Setting fixings too close together can cause the concrete to crack. The recommended minimum distance between fixings is 40mm. Never attempt a fixing application too close to another fixing as this could affect the previously inserted fixing's embedment.

Concrete thickness

It is important that the concrete be at least three times as thick as the fixing penetration. If the concrete is too thin, the compressive forces forming at the fixing's point can cause the free face of the concrete to break away.
This creates a dangerous condition from flying concrete and / or the fixing and also results in a reduction of fastener holding power.

Fixing to steel

The resilience of steel provides a clamping effect to the fixing. This combined with the tremendous heat that is created, provides a welding and clamping effect to give maximum holding power.

Edge distance

The recommended edge distance for a fixing to the edge of steel is 10mm. Never fire the tool within 10mm of the edge of a steel base material because the steel may bend or break off, allowing the fixing to ricochet.

Recommended minimum fastener spacing

The recommended minimum distance between fixings is 20mm. Never attempt a fixing application too close to another fixing as this could affect the previously installed fixing's embedment.

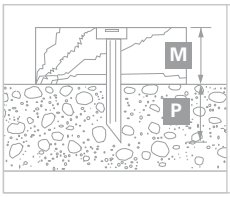
Steel thickness.

Do not fasten into steel base material thinner than the fastener shank diameter. Holding power may be reduced and the fastener may be overdriven.

As a guide when:

- Fixing into steel - min. steel thickness = 3mm

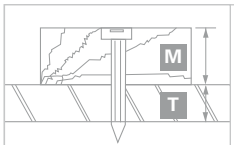
Minimum Shank Length



Minimum Shank Length

Thickness of material (M)	+	Required penetration (P)

Minimum Shank Length



Minimum Shank Length

Thickness of material (M)	+	Thickness of steel (T)	+	5mm point allowance

Adjusting Fastener Penetration – TrakMaster™ & Trakfast™ 800 Plus Only

All Ramset™ Gas Technology tools automatically adjust their power to suit the supporting material. These gas technology tools can adjust their power up to a maximum impact energy that is determined by the capability of each tool model. (This is one of the main differences between Ramset™ Gas Technology tools and Powder Actuated tools).

Even though Ramset™ Gas Technology tools automatically adjust their power, certain applications may require the fastener to penetrate deeper into the base material or penetrate less.

Ramset™ TrakMaster™ and Trakfast™ 800 Plus tools are designed with a feature that allows adjustment of the fastener penetration to be performed. This adjustment is dependent both on the type and hardness of the base material and on the object being fixed. The adjustment does not affect the impact energy that is supplied to the fastener.

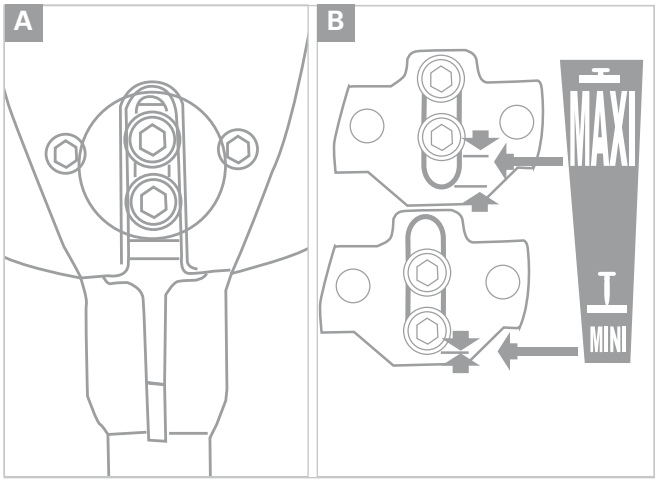
To ensure successful fixing of cable clips (EClip™ etc.) it is recommended that the gas tool is set to the minimum drive position. Failure to do so could result in cracking or breaking of accessories and PVC trunking.

Penetration is adjusted by slackening the two screws (A) on the upper part of the barrel using the allen key provided and moving them backwards or forwards (4mm) in the recess on plate (B).

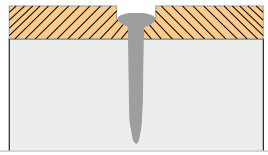
The adjustment range is 4mm. Intermediate adjustments between maximum and minimum are possible.

For best fixing results, check the adjustment position before and during work.

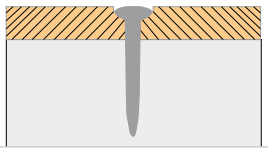
Adjusting Penetration



Maximum Penetration



Minimum Penetration

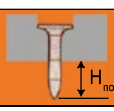
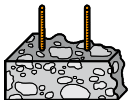
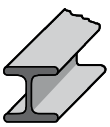


Pulsa™ Technology - TrakMaster™ & Trakfast™ 800 Plus Only

As gases are affected by temperature, to generate exactly the same power in a gas technology tool the fuel injector must vary the amount of gas delivered to the combustion chamber.

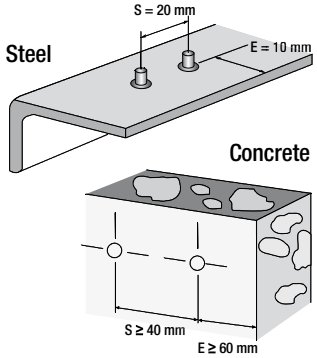
The TrakMaster™ and Trakfast™ 800 Plus tools use PULSA™ technology which employs temperature dependent Electronic Fuel Injection (E.F.I.) to accurately inject the exact amount of gas that the tool requires no matter what the ambient temperature is. The tool actually detects what the ambient temperature is and calculates the amount of gas to release from the fuel cell. This 'smart' technology ensures that the tool delivers the right amount of power…. every time!

Characteristic and Recommended Load

Substrate		Characteristic Resistance		Recommended Load*	
		N^{rk} (kN)	V^{rk} (kN)	N_{rec} (kN)	V_{rec} (kN)
 C20/25 to C60/70 suitable for pre-stressed concrete	H_{nom} = 10 mm	0.34	0.75	0.10	0.25
	H_{nom} = 15 mm	0.87		0.30	
	H_{nom} = 18 mm	1.19		0.40	
	H_{nom} = 20 mm	1.41		0.47	
 Steel = 410 - 450 N/mm² Steel = 500 - 550 N/mm²	H_{nom} = 6.5 mm	5.0	3.6	1.5	1.2

* Loading data is for reference only and it is recommended to make a field test to verify the actual situation. Please contact the sales or technical department for more information.

Recommended Spacing and Edge Distance



S = the minimum spacing between two fixings
E = the minimum distance from the edge

Trakfast™ 800 Plus for Ceiling, Partitioning and General Contractor

Ramset™

Trakfast 800 Plus Gas Tool with 50 Pin Magazine





IPC energy absorber



50 nails magazine



Gas & battery gauges



Sim and streamlined design



Depth of drive no tool



Belt lock



Dust protection



New gas cell



New engineered fastener guide



Support leg

Applications





Product Range - TRAKFAST™ 800 Plus

Part No.	Description	Order Qty
TRAKFAST800 Plus	Trakfast 800 Plus PULSA Gas Tool (with 20 Pin Magazine)	1

Kit includes: Trakfast™ 800 Tool, high impact carry case, 2 batteries, a battery charger, a safety glasses, allen key, dust cover and instruction manual

C6 Pins - Standard Concrete Substrates





Raw Material	Carbon Steel
Corrosion Protection	Zinc Electroplated (Minimum coating 5µm)
Nominal Head Diameter	6.3mm
Nominal Shank Diameter	2.6mm
Shear Strength	1120N/mm²
Tensile Strength	1800N/mm²
Hardness	52-56HR_C for P8C620; 50-55HR_C for others

Part No	Description	Length	Collection	Order Qty
060520	P8C620 Gas Pin	20mm	Black	500
060521	P8C625 Gas Pin	25mm	Black	500
060522	P8C630 Gas Pin	30mm	Black	500
060523	P8C635 Gas Pin	35mm	Black	500
057544	P8C640 Gas Pin	40mm	Black	500

10 strip collation (suitable for use in 20 and 50 pin magazines) + 1 x Pulsa 800 Fuel Cell

Trakfast™ 800 Plus for Ceiling, Partitioning and General Contractor

Ramset™

Trakfast 800 Plus Gas Tool with 50 Pin Magazine





IPC energy absorber



50 nails magazine



Gas & battery gauges



Sim and streamlined design



Depth of drive no tool



Belt lock



Dust protection



New gas cell



New engineered fastener guide



Support leg

Applications





Product Range - TRAKFAST™ 800 Plus

Part No.	Description	Order Qty
TRAKFAST800 Plus	Trakfast 800 Plus PULSA Gas Tool (with 20 Pin Magazine)	1

Kit includes: Trakfast™ 800 Tool, high impact carry case, 2 batteries, a battery charger, a safety glasses, allen key, dust cover and instruction manual

C6 Pins - Standard Concrete Substrates





Raw Material	Carbon Steel
Corrosion Protection	Zinc Electroplated (Minimum coating 5µm)
Nominal Head Diameter	6.3mm
Nominal Shank Diameter	2.6mm
Shear Strength	1120N/mm²
Tensile Strength	1800N/mm²
Hardness	52-56HR_C for P8C620; 50-55HR_C for others

Part No	Description	Length	Collection	Order Qty
060520	P8C620 Gas Pin	20mm	Black	500
060521	P8C625 Gas Pin	25mm	Black	500
060522	P8C630 Gas Pin	30mm	Black	500
060523	P8C635 Gas Pin	35mm	Black	500
057544	P8C640 Gas Pin	40mm	Black	500

10 strip collation (suitable for use in 20 and 50 pin magazines) + 1 x Pulsa 800 Fuel Cell

Trakfast™ 800 Plus for Ceiling, Partitioning and General Contractor

Ramset™

HC6 Pins - Hard Concrete and Steel Substrates





Raw Material	Carbon Steel
Corrosion Protection	Zinc Mechanically Plated (Min coating 10µm)
Nominal Head Diameter	6.4mm
Nominal Shank Diameter	3.0mm (Stepped shank 3.0/ 2.6mm)
Shear Strength	1200N/mm²
Tensile Strength	1950N/mm²
Hardness	53-56HR_C for P8HC615; ≥56HR_C for P8HC617, 22, 27, 32

Part No	Description	Length	Collection	Order Qty
060524	P8HC615 High Strength Gas Pin	15mm	Orange	500
060525	P8HC617 High Strength Gas Pin	17mm	Orange	500
060526	P8HC622 High Strength Gas Pin	22mm	Orange	500
057553	P8HC627 High Strength Gas Pin	27mm	Orange	500
057554	P8HC632 High Strength Gas Pin	32mm	Orange	500

10 strip collation (suitable for use in 20 and 50 pin magazines) + 1 x Pulsa 800 Fuel Cell

Stainless Steel Pins for Special Applications



Raw Material	Stainless Steel Grade 304
Nominal Head Diameter	6.4mm
Nominal Shank Diameter	3.0mm (Stepped shank 3.0/ 2.6mm)
Pull-out Strength Exceeds	1kN (in concrete)

Part No	Description	Length	Collection	Order Qty
SS619TF800	Stainless Steel Pins SS619(TF800)	19mm	Black	500

10 strip collation (suitable for use in 20 and 50 pin magazines) + 1 x Pulsa 800 Fuel Cell

Product Range - Accessories


019337


019683


014605


014641


014642



019903


019649

900507


Part No	Description	Order Qty
019683	50 Pin Magazine for TrakFast™ 800 Plus	1
019337	20 Pin Magazine for TrakFast™ 800 Plus	1
014641	Magnetic Washer Holder for TrakFast™ 800 Plus	1
014642	Flat Magnetic Angle/Z-clip Holder for TrakFast™ 800 Plus	1
018424	TrakFast™ 800 Plus Fastener Guide	1
018423	CableMaster™ 800 Plus Fastener Guide	1
013061	Cleaning Kit - Gas Tool	1
019903	Battery Lithium-Ion P800	1
019649	All-in-one charger	1
900507	In-car charger	1
014605	Pulsa 800 Fuel Cell	1

Ramset™

OPTIMUM ANCHORING SOLUTIONS™

ITW Construction Products Singapore Pte Ltd

3A INTERNATION BUSINES PARK
#06-16 ICON@IBP SINGAPORE 609935
EMAIL: sales@itwcpsea.com
TECHNICAL: Thamkc@itwcpsea.com
Website: itwcpsea.com

SINGAPORE AUTHORISED DISTRIBUTOR

UNIFIX SYSTEMS PTE LTD

10 Admiralty Street, #01-62 Northlink Building. Singapore 757695
EMAIL: sales@unifix.com.sg
CONTACT: +65 8764 8018