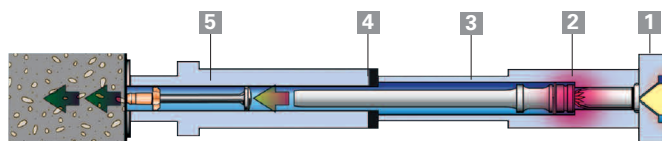






Powder Actuated Technology - How it works

Indirect Acting :



1. Firing Pin
 2. Power Load
 3. Captive Piston
 4. Buffer
 5. Powder Actuated Fastener
- Direct Acting :** Item 3 (piston) do not exist in the system

For **Indirect Acting System**, Ramset™ Powder Actuated Technology uses a captive piston to transfer the energy from the power load to the fastener. In this way the majority of any excess energy, which is produced by the power load, is absorbed within the tool by the buffer.

As for **direct acting tool**, the expanding gases of the ignited power load act directly against the fastener and propel it down the barrel of the tool and into the work surface.

Ramset™ Powder Actuated tools are powerful and reliable which allows them to fasten to steel, concrete and masonry year after year.

How to select a Ramset™ Powder Actuated Technology Fixing to directly fasten an object

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 75mm 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 75mm. 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 13mm. Never fire the tool within 13mm 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 25mm. Never attempt a fixing application too close to another fixing as this could affect the previously installed fixing's embedment.

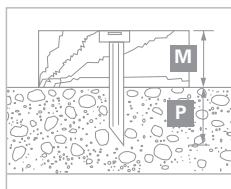
Steel thickness.

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 = 4mm

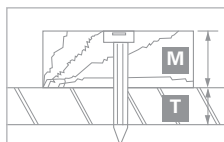
Minimum Shank Length



Minimum Shank Length

Thickness of material (M) + 25mm

Minimum Shank Length



Minimum Shank Length

Thickness of material (M) + Steel Thickness (T) + 6mm point allowance

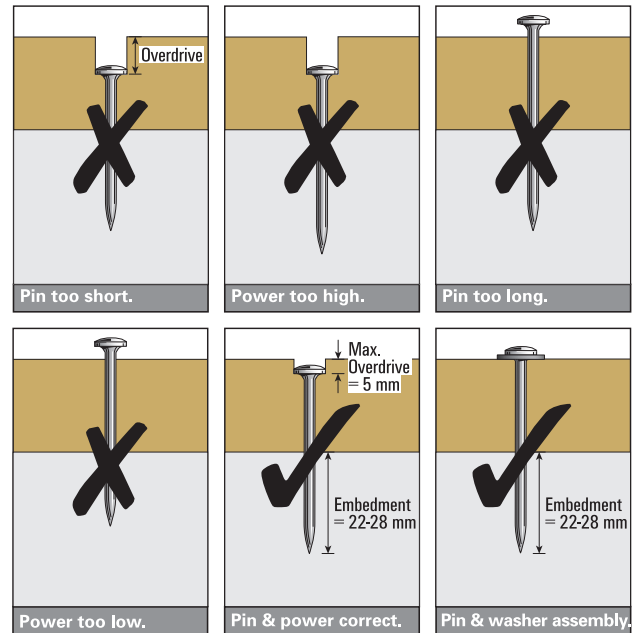
POWDER ACTUATED SYSTEMS

Fastener Selection and Correct Setting

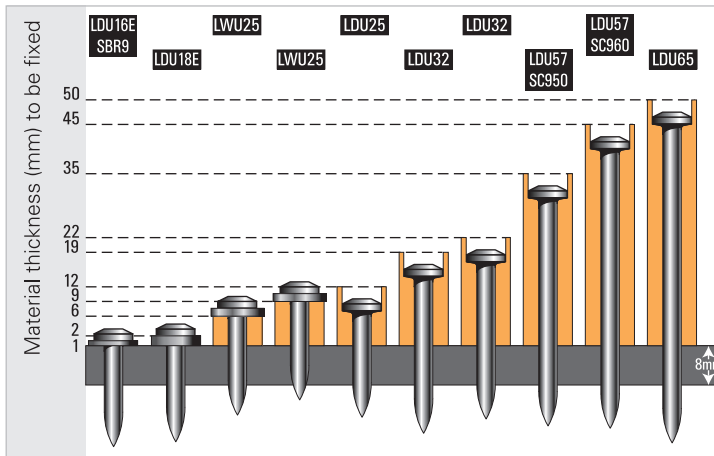
The correct selection and setting of Powder Actuated Fasteners is critical with all tools to ensure a secure fixing and long tool life.

The correct setting of the fastener should be as detailed in the diagrams to avoid excessive overdrive and a secure fix.

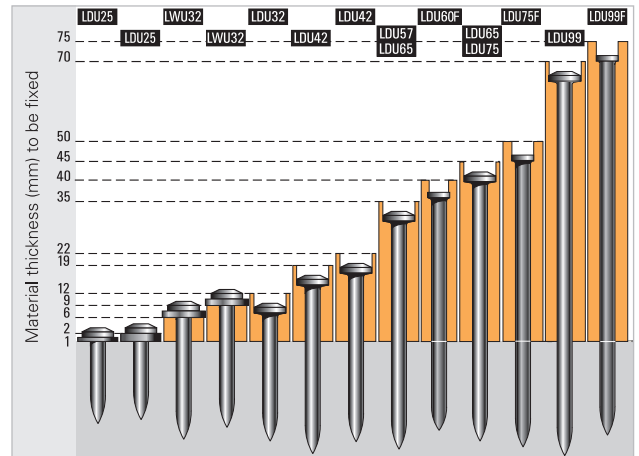
Where possible, a washer or a washered fastener should be used. (Application permitting, to reduce overdrive and produce maximum clamping force). Repeated excessive overdrive will result in damage and short life of tool parts.



Fixing Wood or Metal to Steel



Fixing Wood or Metal to Concrete



Powerload Selection Guide - Concrete

Tool	25 N/mm ² Concrete Low Strength	35 N/mm ² Concrete Medium Strength	50 N/mm ² Concrete High Strength
FixMaster™ TS60P	PLSGR22	PLSYW22	PLSRD22
FrameMaster™ TS750P	PLSGR22	PLSYW22	PLSRD22
JobMaster™ J20S	PLCGR22S	PLCYW22S	PLCRD22S/PLCPU22S

This chart is to be used as a guide only.

Ramset™ recommends to always start a new application with the minimum powerload strength, and if applicable, the tool at minimum power setting, then gradually increase power with load strengths, and if applicable, a combination of power adjustment setting powerload and pin length.

Indirect Acting Piston Tools

The factor of safety applied is 4.0

Recommended Working Loads Concrete (kN)

Shank Diameter (mm)	Penetration (mm)	Concrete Strength					
		20N/mm ²		30N/mm ²		40N/mm ²	
		Tension	Shear	Tension	Shear	Tension	Shear
3.8	25	0.5	1.0	1.2	1.7	1.4	2.3
3.8	32	1.0	1.3	1.7	2.4	1.9	2.7

Recommended Working Loads Steel Plate (kN)

Shank		Steel Plate Thickness							
Diameter		5mm		6mm		8mm		10mm	
(mm)		Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear
3.8		1.9	2.9	2.7	3.4	3.8	3.7	4.0	3.7

Recommended Working Loads Solid Steel (kN)

Shank Diameter (mm)	Solid Steel	
	Tension	Shear
3.8	2.3	2.9

Direct Acting Tools

The factor of safety applied is 4.0

Recommended Working Loads Concrete (kN)

Shank Diameter (mm)	Penetration (mm)	Concrete Strength							
		22N/mm ²		30N/mm ²		40N/mm ²		45N/mm ²	
		Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear
3.8	25	1.2	1.5	1.5	2.2	1.9	2.3	1.9	2.4
3.8	32	1.5	2.3	2.0	2.4	2.5	2.4	2.3	3.9

Recommended Working Loads Steel Plate (kN)

Shank Diameter (mm)	Steel Plate Thickness					
	6mm		10mm		12mm	
	Tension	Shear	Tension	Shear	Tension	Shear
3.8	2.5	3.9	2.8	3.9	3.6	3.9

FIXING TECHNOLOGY

JobMaster™ J20S - Direct Acting Tool



JobMaster™ J20S -heavy duty & low recoil

A solid barrel powder actuated fastening tool that is robust and reliable

Product Advantages

- Safety - dust & debris proof with spall guard
- Ease installation at height - angle clip fit-on well on guard
- Power - adjustable for use with steel or concrete
- Minimal maintenance - easy to dismantle & clean
- Simple design
- Lightweight - minimum fatigue when working overhead
- High actuating force - to fit pin into high strength concrete

Substrates

- Concrete
- Steel



Tool Specifications

Weight 2.4kg

Fixing Capacity:

Timber to Concrete	45mm
Timber to Steel	53mm
Metal to Concrete	3mm
Metal to Steel	3mm
Pin Capacity	up to 75mm
Overall Length	330mm
Barrel	1/4"

Applications

- Fixing steel angle clip for false ceiling application
- Fixing timber to concrete & steel
- Fixing partitioning track to concrete & steel
- Threaded pin applications to concrete & steel
- Fixing formwork

Product Range - JobMaster™ J20S

Part No	Description	Order Qty
J20S	J20S Tool 1/4 solid barrel	1

Kit includes: JobMaster™ J20S tool, high impact carry case, safety glasses, cleaning cloth, cleaning brush, oil and instruction manual.

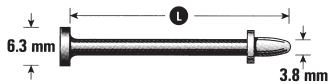
POWDER ACTUATED SYSTEMS

PowerLoad .22 Cal Single Shot to suit J20S 1/4" Barrel



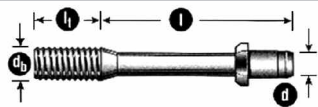
Part No	Description	Colour	Strength	Order Qty
PLCYW22S	PLCYW22S Single Load	Yellow	Medium	100
PLCRD22S	PLCRD22S Single Load	Red	Strong	100
PLCPU22S	PLCPU22S Single Load	Purple	Very Strong	100

Standard Drive Pins for Concrete and Steel



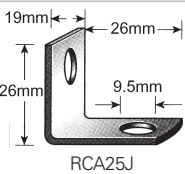
Part No	Description	Drive Pin Length (L)	Max Fixture Thickness	Application	Order Qty
HDB25	HDB25 Drive Pins 3.8x25	25mm	up to 3mm	Concrete/Steel	100
HDB32	HDB32 Drive Pins 3.8x32	32mm	2 to 10mm	Concrete/Steel	100
HDB38	HDB38 Drive Pins 3.8x38	38mm	8 to 10mm	Concrete/Steel	100
HDB50	HDB50 Drive Pins 3.8x50	50mm	20 to 28mm	Concrete/Steel	100
HDB64	HDB64 Drive Pins 3.8x64	64mm	34 to 42mm	Concrete/Steel	100
HDB75	HDB75 Drive Pins 3.8x75	75mm	45 to 53mm	Concrete/Steel	100

Threaded Studs to suit J20S 1/4" Barrel

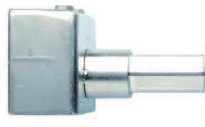


Part No	Description	Shank Length (l)	Thread Size x Thread Length (d _b x l _t)	Order Qty
HTB30U420	HTB30U420 Thread Studs	29mm	1/4" x 20mm	100
HTB30U428	HTB30U428 Thread Studs	32mm	1/4" x 28mm	100
HTB40U428	HTB40U428 Thread Studs	40mm	1/4" x 28mm	100

Accessories



RCA25J



CCJ20



PA9316

Part No	Description	Order Qty
RCA25J	Ramclip Angle 26x26	100
CCJ20	Spall Guard Assembly	1
PA24013A	Barrel Extension 1/4	1
PA24027A	Threaded Protector Cap 1/4	1
PA24076	Bleech Plug	1
PA9316	Lubricating & Releasing Oil	1
PA1613	Safety Glasses	1

FIXING TECHNOLOGY

FixMaster™ - TS60P - The High Volume Tool



FixMaster™ TS60P - The high volume, short pin performer

High fixing power for short pin repetitive fixing of metal fixtures to steel & concrete .

Product Advantages

- Fast - 10 shot strip feed with automatic advance
- Optimum fixing - power adjustment ensures consistent performance
- Power - adjustable for use with steel or concrete
- Minimal maintenance - easy to dismantle & clean to reduce downtime
- Long Life - long life piston & buffer
- Lightweight - minimum fatigue when working overhead

Substrates

- Concrete
- Steel
- Masonry



Tool Specifications

Weight	2.2kg
Impact Force	340J

Fixing Capacity:

Timber to Concrete	35mm
Timber to Steel	50mm
Metal to Concrete	3mm
Metal to Steel	3mm
Pin Capacity	up to 60mm
Overall Length	335mm

Supplied with carry case, maintenance kit & safety glasses

Applications

- Fixing timber to concrete & steel
- Fixing partitioning track to concrete & steel
- Threaded pin applications to concrete & steel
- Fixing brick ties
- Fixing electrical and plumbing clips and brackets to concrete & steel
- Fixing of window frame clip
- Fixing of expanded wire mesh onto concrete

Product Range - Rocket

Part No	Description	Order Qty
TS60P	FixMaster™ TS60P Piston tool	1

Kit includes: FixMaster™ TS60P tool, high impact carry case, safety glasses, maintenance kit and instruction manual.

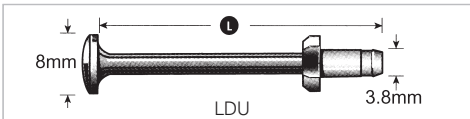
POWDER ACTUATED SYSTEMS

Product Range - Power Strip Loads .27 Cal



Part No	Description	Colour	Strength	Dia x Length	Order Qty
PLSGR22	PLSGR22 Strip Loads	Green	Weak	6.8mm x 11mm	100
PLSYW22	PLSYW22 Strip Loads	Yellow	Medium	6.8mm x 11mm	100
PLSRD22	PLSRD22 Strip Loads	Red	Strong	6.8mm x 11mm	100

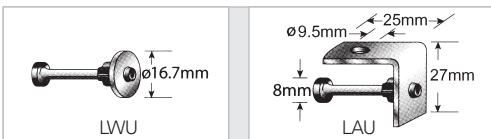
Product Range - Standard Drive Pins for Concrete, Masonry and Steel



Part No	Description	Drive Pin Length (L)	Max Fixture (thickness to steel)	Max Fixture (thickness to concrete)	Order Qty
LDU25	LDU25 Drive Pins 3.8x25	25mm	12mm	2mm*	100
LDU32	LDU32 Drive Pins 3.8x32	32mm	20mm	7mm	100
LDU38	LDU38 Drive Pins 3.8x38	38mm	25mm	12mm	100
LDU42	LDU42 Drive Pins 3.8x42	42mm	30mm	20mm	100

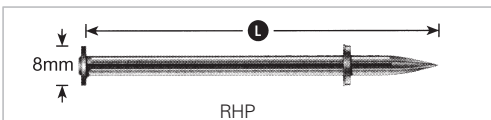
*Denotes steel fixture only

Product Range - Assemblies Washered / Clip Assemblies



Part No	Description	Max Fixture (thickness to concrete)	Order Qty
LWU25	LWU25 with Round Disc	2mm	100
LWU32	LWU32 with Round Disc	8mm	100
LAU25	LAU25 with Angle Clip	2mm	100
LAU32	LAU32 with Angle Clip	8mm	100

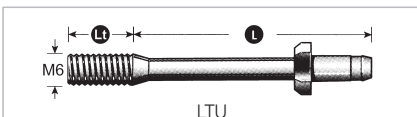
Product Range - Standard Drive Pins for use with 8mm Barrel



Part No	Description	Drive Pin Length (L)	Max Fixture (thickness to steel)	Max Fixture (thickness to concrete)	Order Qty
RHP27	RHP27 Drive Pins	27mm	14mm	3mm*	100
RHP32	RHP32 Drive Pins	32mm	20mm	7mm	100

*Denotes steel fixture only

Product Range - M6 Threaded Drive Pin



Part No	Description	Max Fixture (thickness to steel)	Max Fixture (thickness to concrete)	Order Qty
LTU25M620	Threaded Stud 3.8mmx25mm, Thread M6x20mm	12mm	2mm*	100

*Denotes steel fixture only

FIXING TECHNOLOGY

FrameMaster™ - TS750P - Power Adjustable Tool



FrameMaster™ TS750P - The timber framing expert

Power adjustable tool for fixing timber framing to concrete & general repetitive work

Product Advantages

- Fast - 10 shot strip feed with automatic advance
- Optimum fixing - positive power adjustment ensures consistent performance
- Power - adjustable for use with steel or concrete
- Minimal maintenance - easy to dismantle & clean to reduce downtime
- Long Life - long life piston & buffer
- Lightweight - minimum fatigue when working overhead

Substrates

- Concrete
- Steel
- Masonry



Tool Specifications

Weight	2.5kg
Impact Force	300J

Fixing Capacity:

Timber to Concrete	60mm
Timber to Steel	50mm
Metal to Concrete	3mm
Metal to Steel	3mm
Pin Capacity	up to 85mm
Overall Length	380mm

Supplied with carry case, maintenance kit & safety glasses

Applications

- Fixing timber to concrete & steel
- Fixing partitioning track to concrete & steel
- Threaded pin applications to concrete & steel
- Fixing brick ties
- Fixing of window frame clip
- Fixing of expanded wire mesh onto concrete

Product Range - Rocket

Part No	Description	Order Qty
TS750P	FrameMaster™ TS750P Piston tool	1

Kit includes: FrameMaster™ TS750P tool, high impact carry case, safety glasses, maintenance kit and instruction manual.

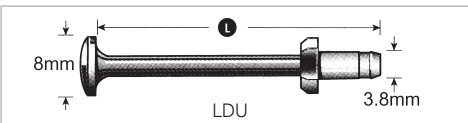
POWDER ACTUATED SYSTEMS

Product Range - Power Strip Loads .27 Cal



Part No	Description	Colour	Strength	Dia x Length	Order Qty
PLSGR22	PLSGR22 Strip Loads	Green	Weak	6.8mm x 11mm	100
PLSYW22	PLSYW22 Strip Loads	Yellow	Medium	6.8mm x 11mm	100
PLSRD22	PLSRD22 Strip Loads	Red	Strong	6.8mm x 11mm	100

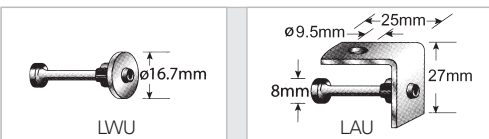
Product Range - Standard Drive Pins for Concrete, Masonry and Steel



Part No	Description	Drive Pin Length (L)	Max Fixture (thickness to steel)	Max Fixture (thickness to concrete)	Order Qty
LDU25	LDU25 Drive Pins 3.8x25	25mm	12mm	2mm*	100
LDU32	LDU32 Drive Pins 3.8x32	32mm	20mm	7mm	100
LDU38	LDU38 Drive Pins 3.8x38	38mm	25mm	12mm	100
LDU42	LDU42 Drive Pins 3.8x42	42mm	30mm	20mm	100

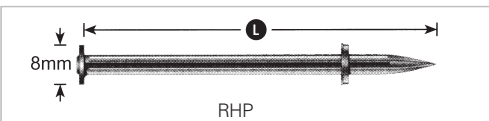
*Denotes steel fixture only

Product Range - Assemblies Washered / Clip Assemblies



Part No	Description	Max Fixture (thickness to concrete)	Order Qty
LWU25	LWU25 with Round Disc	2mm	100
LWU32	LWU32 with Round Disc	8mm	100
LAU25	LAU25 with Angle Clip	2mm	100
LAU32	LAU32 with Angle Clip	8mm	100

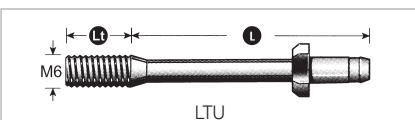
Product Range - Standard Drive Pins for use with 8mm Barrel



Part No	Description	Drive Pin Length (L)	Max Fixture (thickness to steel)	Max Fixture (thickness to concrete)	Order Qty
RHP27	RHP27 Drive Pins	27mm	14mm	3mm*	100
RHP32	RHP32 Drive Pins	32mm	20mm	7mm	100

*Denotes steel fixture only

Product Range - M6 Threaded Drive Pin



Part No	Description	Max Fixture (thickness to steel)	Max Fixture (thickness to concrete)	Order Qty
LTU25M620	Threaded Stud 3.8mmx25mm, Thread M6x20mm	12mm	2mm*	100

*Denotes steel fixture only

FIXING TECHNOLOGY

Spitfire - P370 - Powder Actuated Tool with Magazine

Coming Soon

Spitfire P370 with Magazine



Spitfire P370 Single Shot



Substrates

- Concrete
- Steel
- Masonry

Approval



N° 001137



BS 4078 - Part 2



Insulation fixing

Drylining

Spitfire P370

Fully automatic Spitfire P370, the professional's choice for shot fires fixings into steel, concrete and masonry.

Product Advantages

- Automatic piston return - High install rate with low user fatigue
- Magazine or single shot tool - Automatic firing of up to 10 pins using the magazine
- Disc system - All-metal cartridges eliminate warping at high temperatures. Sequential disc system means less load wastage
- Ergonomic rear handle & soft grip - Makes fixing a one handed operation
- Window - User can see if a disc is loaded in the tool
- Energy absorbing damper - Absorbs vibration and reduces recoil during firing
- Reload identification marker - Informs the user when to reload
- Adjustable magazine - 4 adjustable positions give greater flexibility when working in confined spaces
- Easy maintenance - The fastest powder tool to dismantle, clean and re-assemble allowing on site maintenance and reduced down time

Tool Specifications

Weight	2.8kg (M)	2.7kg (S)
Length	455mm (M)	440mm (S)
Pin Capacity	10 pins - 1 strip (M)	1 pin (S)
Impact Force	350J	
Actuation Pressure	17kg	
Overdrive	36mm (M)	16mm (S)
Cycle Rates	1 pin / 2 secs (M)	1 pin / 1 secs (S)
Rubber spring life	Up to 5,000 shots (M)	Up to 3,000 shots (S)
Fastener length	15 - 90mm*	15 - 90mm collated
Electro galvanising	7 - 15 microns**	

*Pin over 70mm require pre-hammering or adaptor kit. ** High grade steel

Applications

- Insulation panels (adaptor kit required)
- Composite decking to steel
- Kicker plates
- Timber sole plates
- Fire protection brackets
- Brick ties
- Dry lining track / False-ceiling System
- Sheeting
- Steel mesh
- Formwork spacers
- Metal lathing
- Waterproofing / drainage
- Grid flooring (adaptor kit required)

Product Range - Rocket

Part No	Description	Order Qty
010550	Spitfire P370 Piston Tool	1
010530	Spitfire P370 Tool with Magazine C60	1

Kit includes: Spitfire P370 tool with or without Magazine, high impact carry case, safety glasses, maintenance kit and instruction manual.

POWDER ACTUATED SYSTEMS

Product Range - Power Disc Load 6.3/10



Loading

1. Choose the pin length
2. Choose lowest cartridge power
3. Mechanically adjust tool power

Part No	Description	Colour	Strength	Calibre	Order Qty
031740	6.3 Brown Disc Load	Brown	Very Weak	6.3/10	100
031600	6.3 Green Disc Load	Green	Weak	6.3/10	100
031700	6.3 Yellow Disc Load	Yellow	Medium	6.3/10	100
011658	6.3 Red Disc Load	Red	Strong	6.3/10	100

Pin Selection Guide:

Soft steel <small>Ultimate strength: 550 N/mm²</small>	SC9 15	SC9 15-20	SC9 20-25	SC9 25	SC9 30	SC9 40	SC9 50	SC9 60
	Hard steel <small>Ultimate strength: 550 N/mm²</small>	SC9 15	SC9 20	SC9 25	SC9 30	SC9 40	SC9 50	SC9 60
Concrete	C20/25	C9 30	C9 30	C9 35	C9 40	C9 50	C9 55-60	C9 70
	C25/30	C9 25-30	C9 30	C9 35	C9 40	C9 50	C9 55	C9 60-70
	C30/37	C9 20-25	C9 25-30	C9 30-35	C9 35-40	C9 40	C9 50-55	C9 60
	C40/50	C9 20	SC9 15-20	SC9 20	SC9 25-30	SC9 30-35	SC9 40	SC9 50
	C50/60	SC9 15	SC9 20	SC9 25-30	SC9 30	SC9 35-40	SC9 50	SC9 60



Steel:
thickness mini. = 5 mm
recommended static load = 200 kg maxi.

Concrete:
recommended static load = 50 kg maxi.
(C20/25)

C9 Collated Pins - Concrete Substrates



Collated pins for concrete application.
Use Spitfire P370 Magazine (010530) ONLY.

Part No	Description	Length	Box Qty
011330	SC9-20C	20mm	500
011331	SC9-25C	25mm	500
011332	SC9-30C	30mm	500
011333	SC9-35C	35mm	500
011334	SC9-40C	40mm	300
011335	SC9-50C	50mm	300
011337	SC9-55C	55mm	300
011336	SC9-60C	60mm	300

Box includes 1 x spare rubber spring

SC9 Collated Pins - Steel & Concrete Substrates



Collated pins for steel and concrete application.
Use Spitfire P370 Magazine (010530) ONLY.

Part No	Description	Length	Box Qty
011340	SC9-15C	15mm	500
011341	SC9-20C	20mm	500
011342	SC9-25C	25mm	500
011343	SC9-30C	30mm	500
011344	SC9-35C	35mm	500
011345	SC9-40C	40mm	300
011346	SC9-50C	50mm	300
011347	SC9-60C	60mm	300

Box includes 1 x spare rubber spring

C9 Single Shot Pins - Concrete Substrates



Single shot pins for concrete application.

Part No	Description	Length	Box Qty
032520	SC9-25	25mm	100
032530	SC9-30	30mm	100
032535	SC9-35	35mm	100
032540	SC9-40	40mm	100
032550	SC9-50	50mm	100
032560	SC9-60	60mm	100

SC9 Single Shot Pins - Steel & Concrete Substrates



Single shot pins for steel and concrete application.

Part No	Description	Length	Box Qty
032500	SC9-15	15mm	100
032510	SC9-20	20mm	100
032950	SC9-25	25mm	100
032930	SC9-30	30mm	100
032940	SC9-35	35mm	100
032920	SC9-40	40mm	100
032910	SC9-50	50mm	100
032900	SC9-60	60mm	100

FIXING TECHNOLOGY

CR9 Concrete Pins with Ø 14mm Washers



Single shot concrete pins with 14mm diameter washers.

Part No	Description	Length	Box Qty
032070	CR9-25	25mm	100
032100	CR9-30	30mm	100
032090	CR9-40	40mm	100
032010	CR9-50	50mm	100
032020	CR9-60	60mm	100

SBR9 / SB9 Pins - Sheet Metal & Brick Tie



Pins for fixing metal cladding sheets and brick steel framework.
R indicates washered

Part No	Description	Length	Box Qty
032650	SBR9-19	19mm	100
032640	SB9-19	19mm	100

SA9 M6 Threaded Pins - Steel Substrates



Single shot threaded pins

Part No	Description	Pin Length	Thread Length	Box Qty
034820	SA9-6	21mm	6mm	100
034900	SA9-15	30mm	15mm	100

C9 Clip-A Assembled Geogrid Clips



Pins for use in asphalt and concrete.

Part No	Description	Length	Box Qty
033000*	C9-30 Clip-A	30mm	500
032980*	C9-40 Clip-A	40mm	500
032990*	C9-50 Clip-A	50mm	500
320840	C9-60 Clip-A	60mm	300

*Order to order, minimum order quantities apply.

CI9 Insulation Pins Head Ø 90mm - Fixing Semi Rigid Insulation



Head for fixing semi rigid insulation contain pins within the plastic body.
For use with Insulation Adaptor Kit.



Part No	Description	Length	Colour	Box Qty
038720*	CI9-60	60mm	Black anti-UV	100
038730*	CI9-75	75mm	Black anti-UV	100
038750*	CI9-100	100mm	Black anti-UV	100

*Order to order, minimum order quantities apply.

CR9P Concrete Pins with Ø 34mm Washers (Drainage & Waterproofing)



Concrete pins with a 34mm diameter washer for drainage and waterproofing applications.

Part No	Description	Length	Box Qty
038090	CR9-30P	30mm	200
038100	CR9-40P	40mm	200
038110	CR9-50P	50mm	200

CI6 Insulation Pins Head Ø 64mm - Fixing Rigid Insulation



For fixing rigid insulation fixings contain pins within the plastic body. **For use with Insulation Adaptor Kit.**

Part No	Description	Length	Colour	Box Qty
038500*	CI6-40	40mm	Natural	200
038520*	CI6-50	50mm	Natural	200
038530*	CI6-60	60mm	Natural	200
038540*	CI6-70	70mm	Natural	200
038550*	CI6-80	80mm	Natural	200
038580*	CI6-90	90mm	Natural	100
038560*	CI6-100	105mm	Natural	100
038570*	CI6-120	120mm	Natural	100

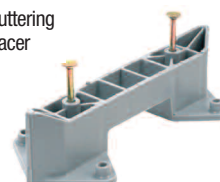
*Order to order, minimum order quantities apply.

C9 Fixing System - Formwork & Shuttering

Formwork
Spacer



Shuttering
Spacer



Part No	Description	Length	Box Qty
032750*	Formwork Spacer + C9-60 Pin	60mm	100
496710*	Shuttering Spacer + C9-60 Pin	50mm	50

*Order to order, minimum order quantities apply.

SA12 M8 Threaded Pins with Ø 12mm Guide Sleeve



For use with Steel Grid Adaptor Kit.



Part No	Description	Pin Length	Thread Length	Box Qty
033760	SA12-8 15/30	30mm	15mm	100

RE Spacer Washers



For use with Steel Grid Adaptor Kit.

Part No	Description	Length	Box Qty
499610	RE-25	25mm	100
499620	RE-30	30mm	100
499630	RE-40	40mm	100

Steel Grid Adaptor Kit



For use with SA12-8 15/30 pins and RE Spacers Washers

Part No	Description	Box Qty
011033	Steel Grid Adaptor for SA12-8 15/30 pins	1
011034	Spare piston for Steel Grid Adaptor Kit	1

Insulation Adaptor Kit



For use with CI9 60 - 100mm pins and CI6 40 - 120mm pins

Part No	Description	Box Qty
011030*	Insulation Adaptor Kit for CI6 and CI9 pins	1
011031*	Spare Piston for Insulation Adaptor Kit	1

*Order to order, minimum order quantities apply.