

precast solutions product guide









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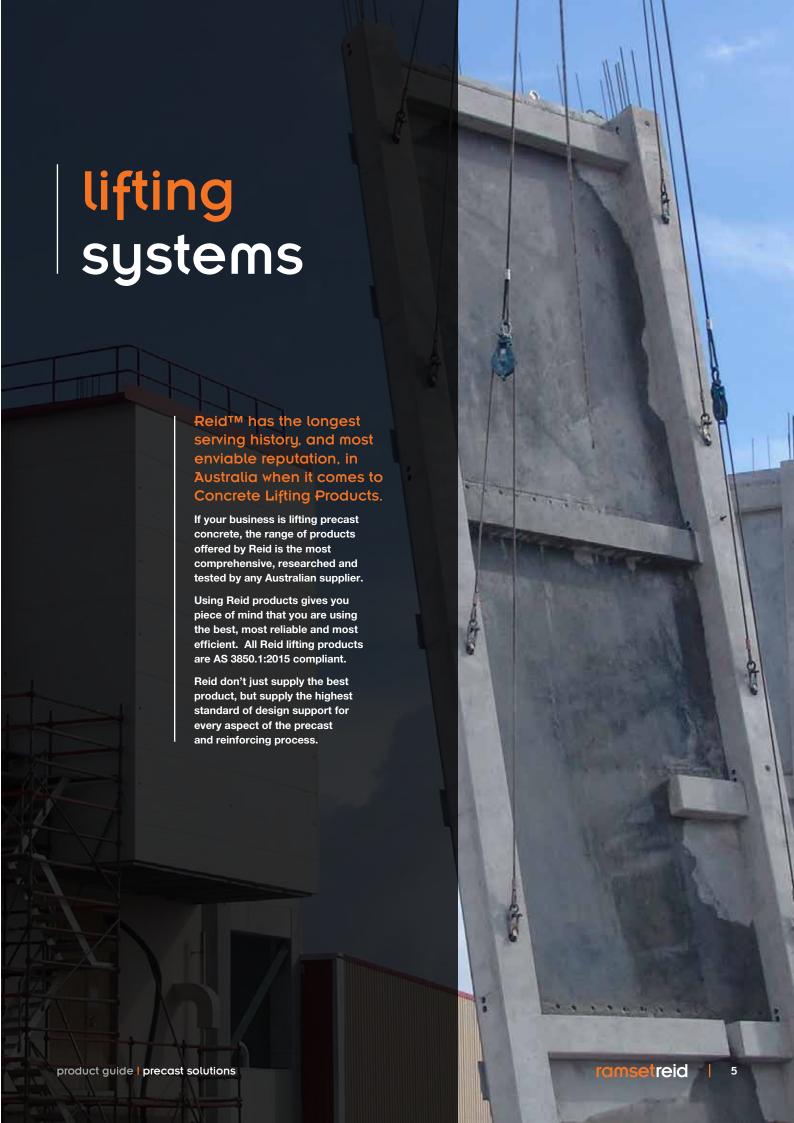
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Graphic Concrete

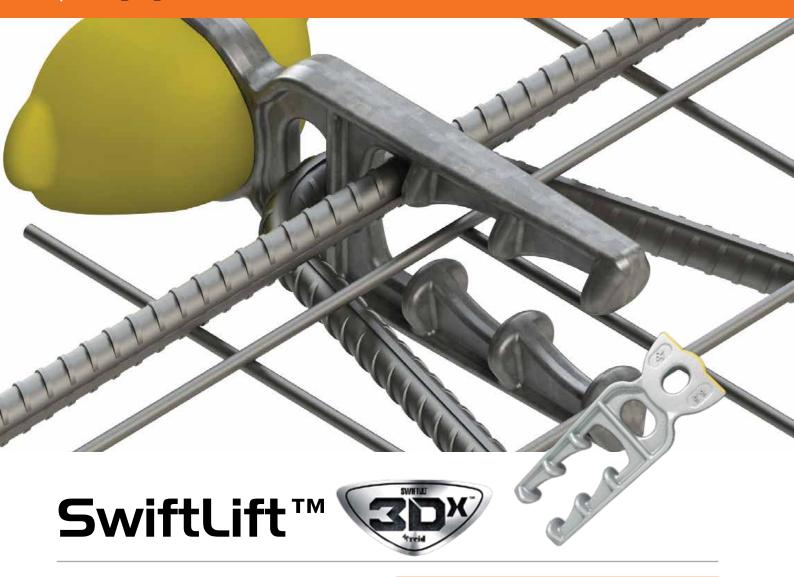
Fitzgerald Formliners

Nirvana Insulated Panels



| Lifting Systems swiftLift™ 3Dx™





Stronger. Faster. Safer.

Developed, and tested in Australia by Reid™, the SwiftLift 3Dx85 anchor system provides high lifting capacities and levels of efficiency and productivity. The unique design distributes loads in the concrete in three dimensions, maximising capacity while reducing outward bursting loads and potential panel damage.

The SwiftLift 3Dx85 provides precasters with one lifting solution to cover 90% of panels. The patented forged design, made from tough Alloy Steel, also allows for faster installation for Precasters. The compact design of the 3Dx is easier to manoeuvre around the mesh and fittings, yet delivers 8.5t capacity.

Compliant to AS 3850.1:2015, 3Dx has been designed to meet the needs of the Australian precast market.



Features & Benefits

- · Unique design distributes loads in the concrete in three dimensions, maximising capacity while reducing outward bursting loads and potential panel damage.
- · Less reinforcement required due to advanced leg profile.
- · Eliminates concrete spalling in shear to edge and rotational lifts of thin concrete elements.
- Complies with AS 3850.1:2015 for the complete system (anchor, clutch and void former).
- · Hot dip galvanised for maximum corrosion protection.
- Extensively tested and independently verified.
- · System colour code to minimise component selection errors.



3Dx Design features



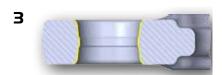
3 dimensional forged design made from tough Alloy Steel.

Provides greater concrete anchorage and anchor strength. Faster installation for precasters. The compact design of the 3Dx is easier to manoeuvre around the mesh and fittings, yet delivers 8.5t capacity.



I-Beam design and Elongated tension bar hole.

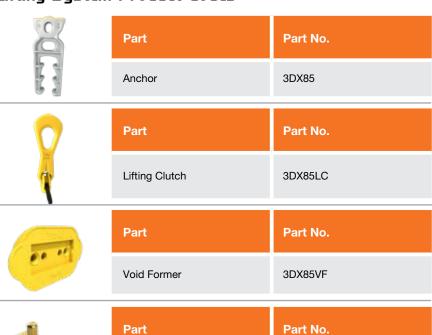
Provides maximum shear capacity without the need for a shear bar! Eliminates the congestion between the tension bar and the central mesh. Provides precasters with both a lower in-place-cost and installation efficiencies over comparative flame cut anchors.



Symmetrical tapered clutch engagement hole.

Forging allows for the profile of the clutch engagement hole to better match the profile of the clutch bolt. Provides for easier, and faster clutch engagement and remote release.

Lifting System Product Codes





STRONGER

Suitable for panels up to 12 tonne. One lifting solution to cover 90% of panels.



FASTER

No shear bars. No interference between tension bar and mesh. Easier and quicker clutch engagement and release.



SAFER

No sharp edges. Lighter than comparable capacity systems.

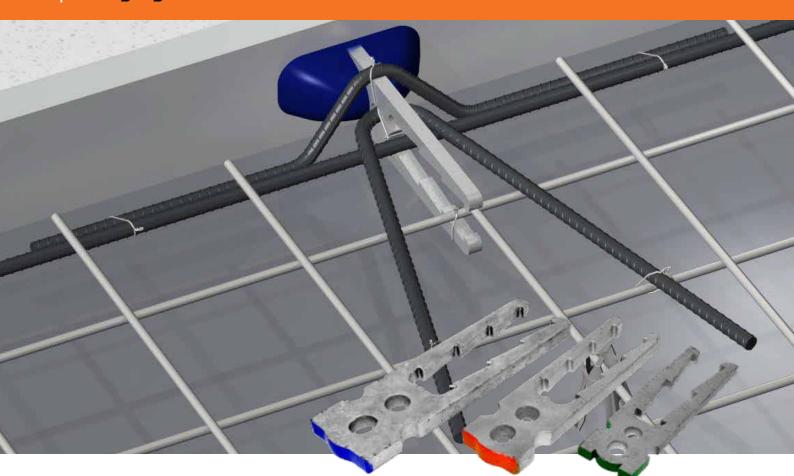
AS 3850.I:2015 Performance Data (WLL)

Nail Plate

	Panel	Max		Stripping			Placement		Tension Bar
Part No.	Thickness	WLL	10MPa	15MPa	20MPa	25MPa	32MPa	40MPa	Ø & Length
	(mm)	(tonne)	Tensile/Shear	Tensile/Shear	Tensile/Shear	Tensile/Shear	Tensile/Shear	Tensile/Shear	(mm)
	150		7.00 / 2.15	7.50 / 2.45	8.00 / 2.83	8.25			
3DX85	175	8.5	7.00 / 2.45	7.50 / 2.70	8.00 / 3.00	8.50	8.50	8.50	N16 / 500mm 8.50
	200		7.00 / 2.65	7.50 / 2.80	8.00 / 3.00	8.50			

3DX85NP





SWIFTLIFT™ JAWS™

Reid™ SwiftLift JAWS Edge Lift Anchors – made from Australian DNA.

JAWS Edge Lift Anchors have been designed in Australia to perform under Australian conditions, in Australian concrete, reinforced with Australian reinforcing bar and mesh. Compliant to AS 3850.1:2015, JAWS offers Precasters edge lift solutions with a rated WLL across range 3t – 10t for typical concrete strengths.

The JAWS teeth configuration allows extremely high retention loads in concrete without the lateral bursting forces that are generated by traditional wavy leg or hairpin anchors.

JAWS will offer a range of WLL's in panels down to 100mm thick and at lower concrete strength values.

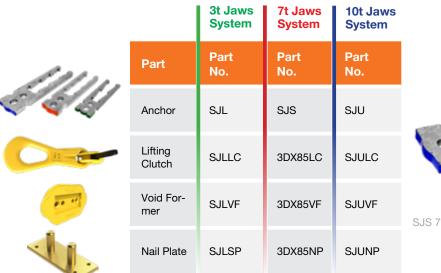


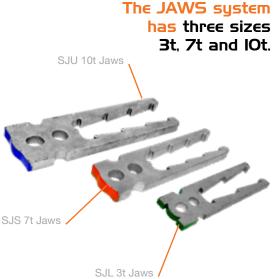
Features & Benefits

- System colour code to minimise component selection errors.
- Compatible with existing Reid™ clutches and void formers.
- Eliminates concrete spalling in shear to edge and rotational lifts of thin concrete elements.
- Rated WLL across range 3t 10t for typical concrete strengths. Range of WLL's in panels down to 100mm thick and at lower concrete strength values.
- Unique design reduces outward bursting loads and potential panel damage.
- Less reinforcement required.
- Hot dip galvanised for maximum corrosion protection.
- Extensively tested and independently verified.



Lifting Anchor & complementary Accessories Product Codes





AS 3850.I:2015 Performance Data (WLL)

Panel	Panel B. Max		Strip	oping		Placement		Tension Bar
Thickness	Part No.	WLL	15MPa	20MPa	25MPa	32MPa	40MPa	Ø and Leg
(mm)		(tonne)	Tensile/Shear	Tensile/Shear	Tensile/Shear	Tensile/Shear	Tensile/Shear	Length ^(mm) 30-60°
100	SJL	3.0	2.40 / 1.30	2.70 / 1.35	3.00*	3.00*	3.00*	N12 x 300
	SJL	3.0	2.70 / 1.50	3.00* / 1.50	3.00*	3.00*	3.00*	N12 x 300
125	SJS	7.0	7.00*/ 2.00	7.00*/ 2.30	7.00	7.00	7.00	N16 x 500
125	SJU	10.0	7.10 / 2.20	7.60 / 2.40	8.00	8.40	8.90	N16 x 500
	SJU	10.0	8.60 / 2.20	9.10 / 2.40	9.40	9.70	9.90	N16 x 750
	SJL	3.0	3.00* / 1.50	3.00* / 1.50	3.00*	3.00*	3.00*	N12 x 300
	SJS	7.0	7.00*/ 2.30	7.00*/ 2.60	7.00	7.00	7.00	N16 x 500
150	SJU	10.0	7.90 / 2.30	8.60 / 2.60	9.10	9.60	10.00*	N16 x 500
	SJU	10.0	9.40 / 2.30	10.00* / 2.60	10.00*	10.00*	10.00*	N16 x 750
	SJU	10.0	10.00* / 2.30	10.00* / 2.60	10.00*	10.00*	10.00*	N20 x 750
	SJS	7.0	7.00*/ 2.60	7.00*/ 2.80	7.00	7.00	7.00	N16 x 500
175	SJU	10.0	8.70 / 2.60	9.50 / 2.80	10.00*	10.00*	10.00*	N16 x 500
175	SJU	10.0	10.00* / 2.60	10.00* / 2.80	10.00*	10.00*	10.00*	N16 x 750
	SJU	10.0	10.00* / 2.60	10.00* / 2.80	10.00*	10.00*	10.00*	N20 x 750
	SJS	7.0	7.00*/ 2.70	7.00*/ 2.90	7.00	7.00	7.00	N16 x 500
200	SJU	10.0	9.50 / 2.70	10.00* / 2.90	10.00*	10.00*	10.00*	N16 x 500
200	SJU	10.0	10.00* / 2.70	10.00* / 2.90	10.00*	10.00*	10.00*	N16 x 750
	SJU	10.0	10.00* / 2.70	10.00* / 2.90	10.00*	10.00*	10.00*	N20 x 750

WLL Load capacities include minimum panel reinforcement: SL82, N16 perimeter, centrally placed * WLL limited by clutch



Ramset™ FaceLifters

Consistent with the Reid™ commitment to local testing, Ramset FaceLift Anchors have been extensively tested in Australian concrete. Analysis of the subsequent test data in accordance with AS 3850.1:2015 Appendix A results in Ramset FaceLift Anchors having Working Load Limit capacities that are far higher and more accurate than those simply calculated using the CCD method applicable for footed anchors.

A fully featured FaceLift system with the security of additional reinforcing which provides durability and maximises safety.

- Solid fixing into reo/mesh via integral bar clip.
- Floating bar clip floats with mesh to prevent anchor movement when trafficked.
- Complies with AS3600-2009 for concrete cover.
- Full plastic underside protection to maximise concrete cover and withstand collisions.
- · Easy and fast void removal.
- Increased safety with bolt in redundancy and guaranteed ductile failure mode in case of concrete failure or overloading.



Part No.	To Suit Panel Thickness (mm)	Head Identification	Pack Qty	Load Group
FL050125B	125	5TR107	16	5 tonne
FL050150B	150	5TR132	16	5 tonne
FL050175B	175	5TR157	16	5 tonne
FL050200B	200	5TR157	16	5 tonne

Compatible Clutch for Ramset FaceLifters

Part No.	Clutch	Working Load Limit	Colour	Image
3DX85LC	Reid SwiftLift 3Dx	8.5t	Gold	
NOTES:				Total Control of the
				3DX85LC



Reid™ SwiftLift™ **FaceLifters**

The Reid SwiftLift FaceLifter features a unique robust wire chair to ensure performance under the harshest conditions.

- High strength wire chair.
- Plastic coated feet.
- Close reinforcement placements.
- Solid fixing into reo/mesh via integral bar clip.
- Floating bar clip floats with mesh to prevent anchor movement when trafficked.
- Easy and fast void removal.



Part No.	To Suit Panel Thickness (mm)	Head Identification	Pack Qty	Load Group
RFL125	125	5 x 95	16	5 tonne
RFL150	150	5 x 120	16	5 tonne
RFL175	175	5 x 120	12	5 tonne
RFL200	200	5 x 170	12	5 tonne

Note: The SwiftLift Face Lifter uses a AS 3850.1:2015 compliant foot anchor. It requires a Reid SwiftLift 5LE clutch.

Compatible Clutch for Reid SwiftLift FaceLifters

Part No.	Clutch	Working Load Limit	Colour	Image
5LE	Reid SwiftLift	5t	Gold	
NOTES:				5LE



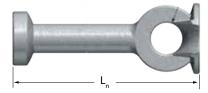
General Lifting

Reid™ SwiftLift™ Lifting Anchors, Clutches and accessories make lifting concrete components easy, efficient and safer during transportation, rigging and lifting of precast concrete elements.

The SwiftLift system utilises a fully engineered approach combining cast-in lifting anchors, recess formers, and custom-fitting lifting clutches. Using the SwiftLift system results in fewer failures, saving time and costs due to damage or construction delays.

SwiftLift Combination Anchors

SwiftLift Combination Anchors feature a combined foot and eye. When used with a reinforcing hanger bar they are able to provide deeper anchorage and increased load capacity in thin wall or low strength concrete elements. The cutout foot and saddle like moulded eye opening provide support for the reinforcing hanger bar. All SwiftLift Combination Anchors comply with AS 3850.1:2015.



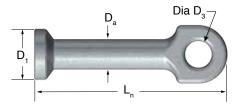
Part No.	Shaft Diameter Da (mm)	Head Diameter D1 (mm)	Foot Diameter D2 (mm)	Cross-hole Diameter D3 (mm)	Length Ln (mm)	Recess Form Max Radius (mm)	Load Group (t)
1REA050	10	19	24	12	50	30	1.3
1REA065	10	19	24	12	65	30	1.3
2REA090	14	26	31	15	90	37	2.5
5REA090	20	36	41	20	90	47	5
5REA120	20	36	41	20	120	47	5

NOTE: Load capacity may be limited by concrete strength and will be affected by the close proximity of other anchors or edges. See technical and design information for details.



SwiftLift Eye Anchors

SwiftLift Eye Anchors are higher load anchors which provide deeper anchorage and increased load capacity in thin wall or low strength concrete elements. They are ideal for bridge beams and other heavy precast concrete elements. All SwiftLift Eye Anchors comply with AS 3850.1:2015.



Part No.	Shaft Diameter Da (mm)	Head Diameter D1 (mm)	Cross-hole Diameter D3 (mm)	Length Ln (mm)	Recess Form Max Radius (mm)	Load Group (t)
10EA180	28	47	25	180	59	10
20EA250	39	70	37	250	80	20

NOTE: All SwiftLift Eye Anchors require a reinforcing hanger bar as per the technical and design information. Load capacity may be limited by concrete strength and will be affected by the close proximity of other anchors or edges. See technical and design information for details.





SwiftLift Foot Anchors

SwiftLift Foot Anchors are the most versatile and widely used anchors in the SwiftLift range. Available in a wide range of Working Load Limits (WLL), all SwiftLift Foot Anchors comply with AS 3850.1:2015. Consistent with the Reid commitment to local testing, SwiftLift Foot Anchors have been extensively tested in Australian concrete comprising of over 500 individual tests, and consuming approximately 150 tonnes of concrete.



Part No.	Description	Shaft Diameter Da (mm)	Head Diameter D1 (mm)	Foot Diameter D2 (mm)	Length Ln (mm)	Pack Qty	Clutches
	1.3 tonne WLL (Max)	10	19	25			1LE
1FA045	45mm Foot Anchor				45	200	
1FA055	55mm Foot Anchor				55	200	
1FA066	66mm Foot Anchor				66	200	
1FA085	85mm Foot Anchor				85	100	
1FA120	120mm Foot Anchor				120	100	
1FA240	240mm Foot Anchor				240	50	
	2.5 tonne WLL (Max)	14	26	35			2LE
2FA055	55mm Foot Anchor				55	100	
2FA075	75mm Foot Anchor				75	100	
2FA090	90mm Foot Anchor				90	100	
2FA120	120mm Foot Anchor				120	50	
2FA170	170mm Foot Anchor				170	25	
	5 tonne WLL (Max)	20	36	50			5LE
5FA075	75mm Foot Anchor				75	50	
5FA095	95mm Foot Anchor				95	25	
5FA120	120mm Foot Anchor				120	25	
5FA170	170mm Foot Anchor				170	25	
5FA240	240mm Foot Anchor				240	25	
	10 tonne WLL (Max)	28	47	70			10LE
10FA150	150mm Foot Anchor				150	10	
10FA200	200mm Foot Anchor				200	10	
10FA340	340mm Foot Anchor				340	5	
	20 tonne WLL (Max)	38	70	98			20LE
20FA250	250mm Foot Anchor				250	5	
20FA340	340mm Foot Anchor				340	2	
20FA500	500mm Foot Anchor				500	2	
	32 tonne WLL (Max)	50	88	135			32LE
32FA700	700mm Foot Anchor				700	1	

NOTE: Load capacity may be limited by concrete strength and will be affected by the close proximity of other anchors or edges. See technical and design information for details.

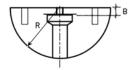




SwiftLift™ Void Formers

Rubber Void Former

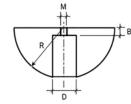
The Rubber Void Former is supplied with a bolt and wing nut for fixing to formwork. The recess former is split into two hinged halves that clamp around the head of the anchor as the wing nut is tightened against the outside of the formwork.



Part No.	R	В	Anchor Size
1RFRO	30	5	1.3t
2RFRO	37	7	2.5t
5RFRO	47	10	5.0t
10RFRO	59	10	10.0t
20RFRO	80	10	20.0t
32RFRO	109	12	32.0t

Steel Round Void Former

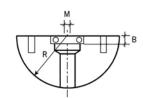
Steel formers are held in place using a central bolt through the formwork.



Void Former Part No.	Rubber Ring Part No.	М	В	D	R	Anchor Size
1SRFRO	1RR	M8	5	22	30	1.3t
2SRFRO	2RR	M12	7	30	37	2.5t
5SRFRO	5RR	M12	10	38	47	5.0t

Articulated Void Former

Articulated Void Formers are a steel void former which are split and hinged. They do not use rubber rings and are used in an identical way to Rubber Void Formers but have a more positive and rigid anchor location.



Part No.	R	М	В	Bolt	Anchor Size
1SRFROART	30	M10	10	M10	1.3t
2SRFROART	37	M10	10	M10	2.5t
5SRFROART	47	M10	10	M10	5.0t



SwiftLift™ Lifting Clutch

SwiftLift Lifting Clutches cover the full SwiftLift range from I.3t to 32t WLL.

SwiftLift Clutches have been designed so that they cannot spontaneously disengage whilst the system is under load at any orientation, provided they are correctly connected to the head of the correct anchor in the recess. When the lift is complete and the load released, the SwiftLift Clutch is quickly and simply disengaged.

Part No.	Pack Qty	WLL (Max)
1LE	1	1.3t
2LE	1	2.5t
5LE	1	5.0t
10LE	1	10.0t
20LE	1	20.0t
32LE	1	32.0t



SwiftLift Lifting Clutch markings



WLL per clause 2.6 (iii)



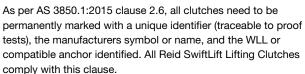
Reid name & symbol per clause 2.6



Unique identifying serial number per clause 2.6 (i)









reinforcing systems

Reinforcing products from ramsetreid provide simple solutions for structural concrete connection, reducing both labour and material costs.

Using ReidBar[™] and ReidBar components provides many benefits for Precasters and Builders including:

- Suitable for very thin concrete sections, such as wall panels.
- Full range of threaded fittings for joining, anchoring and terminating.
- Simplifies the detailing and fixing of rebar.
- Reduces bar congestion problems; laps, cogs, eliminated in heavily reinforced areas.
- Eliminates cast-in starter bars to simplify transport and handling.





ReidBar™ Systems

ReidBar is a 500N Grade continuous threaded reinforcing system, enabling fast, easy and efficient reinforcement connections in any concrete structure.

- No need for complex calculations.
- Components achieve ultimate bar capacity and full bar strength.
- More effective engineered connections.
- Simple, easy to use. No special tools required. Fast, no-fuss connections.
- · Simplified detailing.
- · Complete system for all applications.
- No protruding bars in precast elements.

- Reduced formwork damage.
- Reduced OH&S risk.
- · Increased productivity.
- · Meets the requirements of 'Steel Reinforcing Materials, AS/NZS 4671:2001'.
- Improved structural integrity.
- Ultimate strength development with short embedment.
- · Suitable for thin concrete sections.

ReidBar Reo

Continuously threaded, hot rolled, Grade 500N reinforcing bar to AS 4671. Achieves efficient continuous reinforcing throughout the whole job. It is recommended that all ReidBar Reo is saw cut when used with ReidBar fittings.

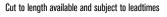
Part No.	Length Bar	Bundle Type (m)	Pack Qty (approx 2 tonnes)
RB126	RB12	6	364
RBA166	RBA16	6	206
RBA206	RBA20	6	132
RB256	RB25	6	85
RB326	RB32	6	52

^{*}Lead time applies

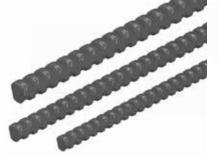
ReidBar Starters

ReidBar starter bar systems have been developed to provide full strength and positive connections between precast concrete panels, floor slabs and insitu suspended floors.

Part No.	Description	Length (mm)	Pack Qty
RB12SB	Starter bar for RB12 fittings	540	50
RBA16SB	Starter bar for RBA16 fittings	660	50
RBA20SB	Starter bar for RBA20 fittings	850	25
RB25SB	Starter bar for RB25 fittings	1150	25
RB32SB	Starter bar for RB32 fittings	1450	10



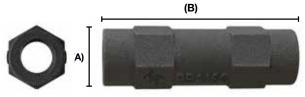






ReidBar Coupler

System to couple two ReidBar together. Commonly utilised for wet joints and panel to panel applications.



Part No.	Description	Outer Diameter (A) (mm)	Length (B) (mm)	Hex A/F (mm)	Pack Qty
RB12C	ReidBar Coupler for RB12	22	90	25	100
RBA16C	ReidBar Coupler for RBA16	30	102	30	25
RBA20C	ReidBar Coupler for RBA20	33	129	36	20
RB25C	ReidBar Coupler for RB25	43	180	45	25
RB32C	ReidBar Coupler for RB32	55	210	57	10
RB12CG*	ReidBar Coupler for RB12 (Gal)	22	90	25	100
RBA16CG*	ReidBar Coupler for RBA16 (Gal)	30	102	30	25
RBA20CG*	ReidBar Coupler for RBA20 (Gal)	33	129	36	20
RB25CG*	ReidBar Coupler for RB25 (Gal)	43	180	45	10
RB32CG*	ReidBar Coupler for RB32 (Gal)	55	210	57	10

^{*}Lead time applies for Hot Dip Galvanised components

(B)

ReidBar to Metric Couplers

The ReidBar to Metric Coupler is ideal when a fully engineered, full capacity fixing is required close to an edge, along an edge of a panel or at close spacings.



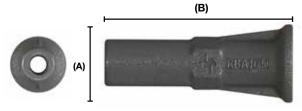
Part No.	Description	Length (mm) (B)	Hex A/F (mm)	Metric Thread Length (mm)	Pack Qty
RB12M16CG	RB12 to M16	90	25	40	70
RBA16M20CG	RBA16 to M20	102	30	45	50
RBA20M24CG	RBA20 to M24	122	35	50	20

NOTES:			



ReidBar Inserts

System to anchor ReidBar. Commonly utilised for floor to wall or floor to panel connections.



Part No.	Description	Foot Diameter (A) (mm)	Length (B) (mm)	Cross Hole Diameter (mm)	Pack Qty
RB12TI	ReidBar Insert for RB12	38	100	N/A	75
RBA16TI	ReidBar Insert for RBA16	50	118	N/A	30
RBA20TI	ReidBar Insert for RBA20	64	148	N/A	20
RB25TI	ReidBar Insert for RB25	80	191	N/A	10
RB32TI	ReidBar Insert for RB32	101	210	N/A	5
RB12TIG*	ReidBar Insert for RB12 (Gal)	38	100	N/A	75
RBA16TIG*	ReidBar Insert for RBA16 (Gal)	50	118	N/A	30
RBA20TIG*	ReidBar Insert for RBA20 (Gal)	64	148	N/A	20
RB25TIG*	ReidBar Insert for RB25 (Gal)	80	191	N/A	6
RB32TIG*	ReidBar Insert for RB32 (Gal)	101	210	N/A	5
RB12RI	ReidBar Rebate Insert for RB12	39	78	14.5	60
RBA16RI	ReidBar Rebate Insert for RBA16	51	96	14.5	30

^{*}Lead time applies for Hot Dip Galvanised components

ReidBar Nut

System to fix and/or tighten ReidBar.





Part No.	Description	Length (mm)	Hex A/F	Hex A/C	Pack Qty
RB12N	ReidBar Nut for RB12	40	25	25	50
RBA16N	ReidBar Nut for RBA16	45	30	34	50
RBA20N	ReidBar Nut for RBA20	45	36	42	25
RB25N	ReidBar Nut for RB25	65	46	53	30
RB32N	ReidBar Nut for RB32	82	55	63.5	15
RB12NG*	ReidBar Nut for RB12 (Gal)	40	25	25	50
RBA16NG*	ReidBar Nut for RBA16 (Gal)	45	30	34	50
RBA20NG*	ReidBar Nut for RBA20 (Gal)	45	36	42	50
RB25NG*	ReidBar Nut for RB25 (Gal)	65	46	53	30
RB32NG*	ReidBar Nut for RB32 (Gal)	82	55	63.5	30

^{*}Lead time applies for Hot Dip Galvanised components



ReidBar Wing Nut

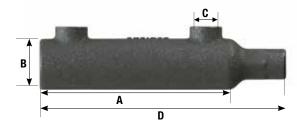
System to fix and/or tighten ReidBar. Commonly utilised for formwork systems.



Part No.	Description	Hex A/F	Height (mm)	Overall Diameter (mm)	Pack Qty
RB12WN	ReidBar Wing Nut for RB12	22	40	58	100
RBA16WN	ReidBar Wing Nut for RBA16	30	51	98	30

ReidBar Grout Sleeve

Are used for connecting ReidBar lengths where one side of the connection must be female or when converting to standard reinforcing bar. The internal surfaces are ribbed to ensure full bar break after sleeve has been filled with high performance cementitious grout (65MPa, 28-day compressive strength).



Part No.	(A) Max Internal Embedment Depth (mm)	(B) Body ID (mm)	(C) Internal Grout Hole	(D) Tube Length (mm)	Suits
RB12GS	150	28-40	21	200	RB12
RBA16GS	190	32	21	240	RBA16
RBA20GS	224	40	21	290	RBA20
RB25GS	274	48	21	360	RB25
RB32GS	320	55	26	445	RB32

NOTES:			



ReidBar™ Accessories

ReidBar fittings are accompanied by various accessories that make installation easier.

ReidBar Nail Plates

Supports for fixing to boxing and formwork for positioning all ReidBar internally threaded components.

Part No.	Description	Suits	Pack Qty
NP12RB	ReidBar Nailing Plate for RB12	RB12TI, RB12C	100
NP16RB	ReidBar Nailing Plate for RBA16	RBA16TI, RBA16C	100
NP20RB	ReidBar Nailing Plate for RBA20	RBA20TI, RBA20C	100
NP25RB	ReidBar Nailing Plate for RB25	RB25TI, RB25C	100
NP32RB	ReidBar Nailing Plate for RB32	RB32TI, RB32C	100



ReidBar Stick On Support

ReidBar Stick-On supports are designed for push on-pull off support ensuring 90° to surface installation.

Part No.	Description	Suits	Pack Qty
RB12SP	ReidBar Stick on Support for RB12	RB12	100
RBA16SP	ReidBar Stick on Support for RBA16	RBA16	100



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ReidBar Threaded Insert Chair

Designed to enable ReidBar inserts to be easily used for near face applications in precast elements. Used in conjunction with the appropriate nail plate, the TI Chair is fully adjustable to suit 125, 150, 175, and 200mm panel thicknesses and can be trimmed for intermediate thicknesses.

Part No.	Chair	Adaptor	Legs	Panel Thickness	Pack Qty
TICHAIR	1	1	3	125-200	90

Nail Plate Panel Thickness 125 to 200mm Insert

NOTE:

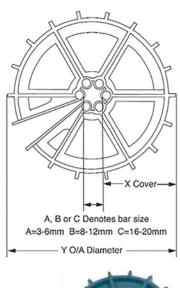
- 1: The chair will take all inserts from RB12 to RBA20.
- 2: Use appropriate size nail plate to attach insert into chair.
- 3: Can be used for all metric and coil thread inserts with appropriate nailing plate.

Circular Spacer

The unique design offers accurate cover for 360 degrees. It will not twist when in position due to the in-built sleeves which adjusts to hold the bar firmly. As the size of the bar increases the cover remains the same. Ideal for:

- Civil precast and commercial construction
- · Columns and piers
- · Bar spacers in conduit

Part No.	X Cover	Y O/A Diameter	Bar Size
CB20CR12	20	50	8-12
CB25CR12	25	60	8-12
CB30CR12	30	70	8-12
CB40CR12	40	90	8-12
CB50CR12	50	110	8-12
CB65CR12	65	145	8-12
CB75CR12	75	160	8-12





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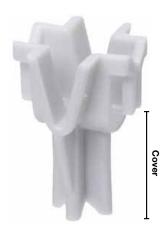


Reinforcing Support Chairs

Mesh Chair

The mesh chair is designed to clip easily to the intersection of the mesh, providing greater strength and stability. Mesh chairs can be used with extensions for added height if required.

Part No.	Cover (mm)	Pack Qty
MESH20	20	100
MESH25	25	100
MESH30	30	100
MESH35	35	100
MESH40	40	100
MESH50	50	100
MESH60	60	100
MESH65	65	100
MESH75	75	100



Panel Chair

Designed to support single layered mesh. The easy push on clip mechanism allows the chair to swing into a vertical position when lowering the mesh into the form and suits all mesh sizes including N12 bars. Dimples located at the base of the legs ensures minimum exposure.

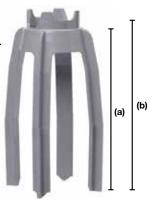
Part No.	Cover (mm)	Pack Qty	Pallet Qty
BCPANEL3040	30/40	100	5000
BCPANEL5060	50/60	100	5000
BCPANEL6575	65/75	100	5000
BCPANEL90100	90/100	100	5000



Top Deck Chair

The dual height top deck chair has been designed to support both top mesh and top reinforcing bars in suspended decks, thick tilt-up panels and any tall spacer applications, where strength and stability is critical.

Part No.	a (Height)	b (Height)	Pack Qty
BPDST090100	90	100	50
BPDST110120	110	120	50
BPDST130140	130	140	50
BPDST150160	150	160	50
BPDST170180	170	180	50
BPDST190200	190	200	50





Bar Chair

Fast Clip Bar Chairs accommodate bar sizes from 4mm to 20mm. Each chair is identified by cover and can be used with extensions for added height and stability if required.

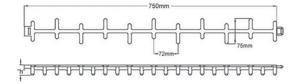
Part No.	Cover (mm)	Pack Qty
FCB25	25	100
FCB30	30	100
FCB35	35	100
FCB40	40	100
FCB50	50	100
FCB60	60	100
FCB65	65	100
FCB75	75	100



Cover

Bar Deck Rail

The 750mm long plastic deck rail is a continuous spacer for formwork applications, with sets of vertical legs at approximately 75mm centres and another central leg in between the sets; the deck rail is strong and stable, yet provides minimum exposure.



Part No.	Height "h" mm	Pallet Qty
BDR030	30	1300
BDR035	35	1300
BDR040	40	1100
BDR065	65	800
BDR075	75	700
BDR100	100	500



NOTES:

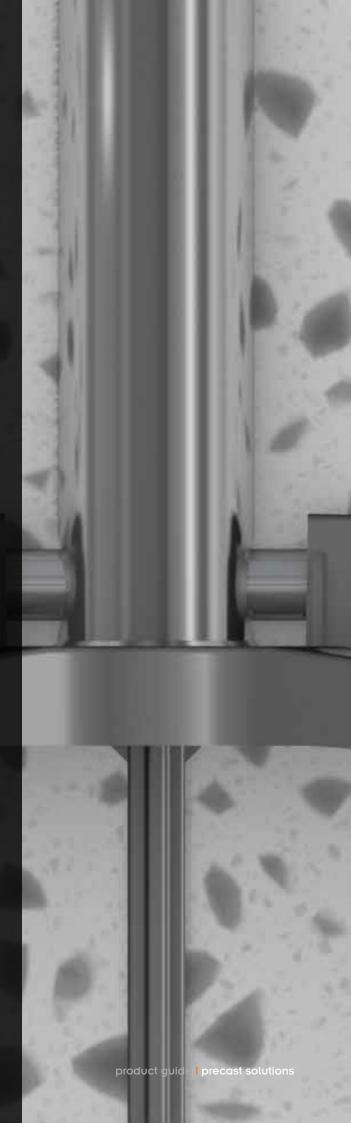


NOTES

precast connections

Not only do Reid offer an extensive range of AS 3850.1:2015 compliant ferrules to suit almost every application, but also a range that delivers consistent reliability and quality, supported with technically superior design information.

Extensive research, development and testing are invested in all Reid ferrules, with performance data derived and verified through hundreds of tests, utilising both in-house and independent testing facilities.





Elephant Foot™ Ferrule

The Reid™ Elephant Foot Ferrule is a premium grade, medium to heavy duty, cast-in ferrule, and compliant to AS 3850.I:20I5.

Elephant Foot Metric Ferrule Key Features:

- 5.8 grade steel or 316 grade Stainless Steel.
- Use in near or far face applications with our range of accessories.

Designed to produce a ductile connection when used in conjunction with grade 4.6 bolts.

- Waisted design ensures capacity is not limited by the steel strength at the cross hole.
- Cross hole to suit N12 on larger sizes.
- Footed design ensures maximum concretecapacity without the need for a cross bar.
- May be used with rebar for fixing to mesh.

FE20095 & FE20095GH are the only ferrules recommended for bracing, therefore are the only ferrules requiring AS 3850.1:2015 WLL.







Design

Waisted design ensures capacity is not limited by the steel strength at the cross hole.



Application

Use in near or far face applications with the Reid range of accessories.

Part No.		Ferrule size,		Ferrule length,	Cross hole	Pack
Zn	Gal	316SS	ab	L (mm)	to suit	Qty
FE10045	-	FE10045SS	M10	45	R8	250
FE12055	FE12055GH	FE12055SS	M4O	55	R8	200
FE12095	FE12095GH	-	M12	95	R10	100
FE16070	FE16070GH	FE16070SS	M16	70	NHO	100
FE16095	FE16095GH	-	IVI I O	95	N12	75
FE20070	FE20070GH	-	M20	70	N12	75
FE20095	FE20095GH	FE20095SS	IVIZU	95	INIZ	50
FE24095	FE24095GH	-	M24	95	N12	40



Reid™ Stiletto™ Round Bar Ferrules

Heavy duty, cast-in ferrule that deliver consistence reliability and quality, ideal for high shear loads, structural connections, panel to panel connections and general fixing points. Requires N12 cross bar, or R10 (500 Gr).



Zinc Part No.	Galvanised Part No.	Thread Size	Ferrule Length (mm)	Thread Length (mm)	Pack Qty
FS16070	FS16070GH	M16	70	32	100
FS16095	FS16095GH	IVI I O	95	39	75
FS20070	FS20070GH	M20	70	32	75
FS20095	FS20095GH	IVIZU	95	39	50

Double Ended Round Bar Solid Ferrules

Reid Double Ended Round Bar Ferrules are high quality solid ferrules, with a common outside diameter. Ideal for applications requiring high strength fixing points to both faces of the panel at the same location. Requires N12 x 300mm cross bar.



Part	Thread	Min Thread	Ferrule	To Suit*	Pack
No.	Size	Length (mm)	Length (mm)	Panel (t)	Qty
FD20140S	M20	38	140	150	25

^{*} When used with Reid Glue on Nailing Plates and Reid Antennae Caps.

NOTES:			

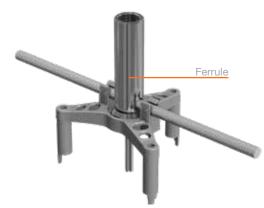


Reid™ Stiletto™ Ferrule Chair

The Reid Stiletto ferrule chair is the most stable and secure chairing solution for a wide range of Reid ferrules. Designed with 3 legs, to take up variations in the bed, as well as a central support that provides additional strength when required.

- Can be positioned within 40mm of panel edge much closer than other chairs on the market.
- Minimum voids due to small foot print and shape of the legs.
- Dimple in the centre of the chair for central location of the ferrule.

Note: Ferrule Length Required to suit panel thickness - All measurements (mm)



Doub No.		Р	anel Thickne	ess		Stand	Pack Qty
Part No.	100	125	150	175	200	Height	
FSC25	70	95				25	50
FSC50		70	95			50	50
FSC75			70	95		75	50
FSC100				70	95	100	50

Round Bar Ferrule Chair

An easy to use ferrule chair developed to locate "near face" round bar ferrules in tilt-up panels. Strong and non corrosive, available to suit most common panel thicknesses. Features two stage height, lock or slide cross bar, and extension legs for pinning available.

Part No.	Panel Thickness	Chair Height	Pack Qty
FWSC150	150mm	50mm	50
FWSC175	175mm	75mm	50
FWSC180	180mm	80mm	50
FWSC200	200mm	100mm	50



Chair required to suit panel thickness, using 96mm ferrule.

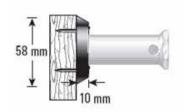
NOTES:			



Ferrule Nailing Plate

Reusable locator for ferrules on timber form.

Part No.	To Suit	Colour	Pack Qty
FM12N	M12	Red	100
FM16N	M16	Green	100
FM20N	M20	Blue	100
FM24N	M24	Yellow	100



Glue On Nailing Plates

Glue on nailing plates are used to attach ferrules to steel formwork or casting beds, where screwing or drilling is not desired. Designed to be used with Reid Double Sided Spots, they have a recess on the bottom side that allows for easy removal after the panel has been lifted.

Part No.	To Suit	Pack Qty
NP12GLUE	M12	100
NP16GLUE	M16	100
NP20GLUE	M20	100



Double Sided Spots to Suit:			
Part No.	Diam Pack	Pack Qty	
NPSPOT	58mm	100	

Ferrule Antennae Cap

Antennae simplify ferrule locating. Push fit, easy to remove.

Part No.	To Suit	Colour	Pack Qty
ANTCAP M12	M12	Red	100
ANTCAP M16	M16	Green	100
ANTCAP M20	M20	Blue	100
ANTCAP M24	M24	Yellow	100



Reid SwiftCap™

Designed with specially tapered sides that induce a crack line at the concrete surface when removing, allowing easier, cleaner removal. Can also be fastened to formwork and used as an economical quick fit locater.

Part No.	To Suit	Colour	Pack Qty
SCM16	M16	Green	100
SCM20	M20	Blue	100



chemicals precast

Precast concrete construction demands chemicals to improve cycle times, clean and maintain formwork, and enhance concrete finishes.

The range of Precast Chemical Solutions from ramsetreid includes Release Agents, Sprayers, and Cleaning and Maintenance products to ensure overall costs are reduced whilst producing the highest quality Precast components.

Partnering with Nox-Crete, a leading manufacturer of Precast Chemical products, ramsetreid offers trusted chemical solutions through performance-driven products.

As part of ramsetreid, our Precast customers have access to the Ramset™ Chemical Anchoring range including Epcon™ and ChemSet™ Injection Adhesives, the leading Chemical Anchoring brands in Australia and New Zealand due to high quality, reliability and versatility.





NOX-CRETE Bio-Nox

Biodegradable, water based, maximum performance concrete form Release Agent.

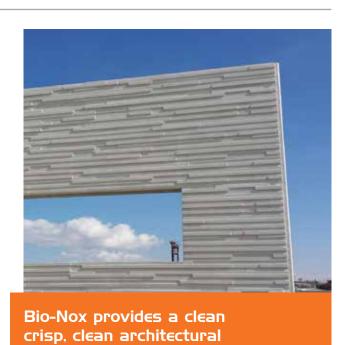
Nox-Crete BIO-NOX is a water-based, 100% biodegradable high performance form Release Agent which chemically reacts with concrete to produce a slippery soap-like film that positively prevents bonding on concrete to form surfaces.

The formulation allows a high quality Precast finish, across several types of form surfaces, including highly textured architectural panels.

The 100% biodegradable formulation is free from conventional form oil, diesel oil or kerosene. It is a vegetable oil based emulsion is ideal for use on expensive rubber or latex formliners, as it does not degrade the surface from repeated use, producing beautiful, bright architectural panels.

It also reduces the likelihood of skin or odour irritations that can occur with petroleum based Release Agents.

Application with a Nox-Crete Excel or Perfect Sprayer system is highly recommended to get even application coverage and a quality result.



finish to concrete surfaces



Features & Benefits

- Water Based
- Combines methyl esters derived from corn and soybean oil with organic fatty acids
- Will not harm rubber or latex formliners
- Produces beautiful, bright white and void-free cast concrete surfaces
- Helps keep forms clean

- Incorporates a rust inhibitor to prevent flash rusting of steel forms
- · Excellent emulsion stability
- Also incorporates an antioxidant to minimize the oxidation of applied films
- · Readily biodegradable

Uses

- Specifically designed for producing bright white architectural wall panels free of blemishes and discoloration
- Smooth, non-absorptive form surfaces
- Ideal for steel, fiberglass, plastic, rubber, latex forms and formliners and all nonabsorptive overlaid forms

Application Guidelines Nox-Crete Excel For best results, it is recommended to apply Bio-Nox using Spray System

Form Surface or Concrete Finish Type

Spray tip

CF Valve

Coverage rates

Non-Absorptive

800067

40psi

50 - 60 m²/L

Absorptive

8001

40psi

20 - 25 m²/L

Packaging & Product Codes

the Nox-Crete Excel or Perfect spray system.

Part No.	Size	Pack Qty
NOXBIO20	20L	Pail
NOXBI0200	200L	Drum

Related Products

Part No.	Description	Pack Qty
NOXEXCEL	Nox-Crete Excel 130 Pro Sprayer	each – 19L
NOXPERFECT	Nox-Crete Perfect Form Sprayer	each – 15L
NOXCFVALVE40	Nox-Crete CF Valve 40 psi (Green/Blue)	each
NOXTIP8001	Nox-Crete Teejet Spray Tip 8001	each
NOXTIP800067	Nox-Crete Teejet Spray Tip 800067	each



IOO% biodegradable formulation free of conventional form oil, diesel oil or kerosene.



NOTE

Using the Nox-Crete Excel sprayer is highly recommended to get the full potential of Bio-Nox. The sprayer recommendations have been derived specifically based on the products' material properties to ensure even coverage resulting in an exceptional and economical result.



NOX-CRETE Release Agent #10

Maximum performance Precast Release Agent for consistently high quality finishes.

Nox-Crete Release Agent #10 (RA#10) reacts chemically with the alkalis in concrete to form a soapy film which allows trapped air and excess water to escape during vibration, minimizing surface voids and providing a smooth, uniform concrete finish. When used on steel, it reacts with the iron present on the form surface to form a film that retards rust formation between pours.

It is ideally suited to high volume Precast works with excellent reproducibility of quality Precast finishes for wall panels, architectural wall facades, high relief textured panels as well as all other general Precast construction elements.

The solvent is chemically engineered to be effective even when applied via a very fine spray mist which allows very high coverage rates and excellent economy to busy Precast yards. The inherent rust inhibitor in the formulation suits high cycle frequency, keeping forms in excellent condition for longer and reducing build-up on the form surface. Application with a Nox-Crete Excel Sprayer system is highly recommended to get very high efficiency coverage rates, resulting in an excellent finish.



Features & Benefits

- Solvent based
- Incorporates a blend of very fast-drying solvents
- Produces architectural, bright white void-free concrete surfaces
- Minimizes surface air voids (bugholes)
- Performs extremely well on steel and fiberglass forms
- Helps keep forms clean breaks down and removes hardened concrete buildup through regular use
- Incorporates a rust inhibitor to prevent flash rusting of steel forms
- Has a high flash point (>60°C)

Uses

- Wet cast applications requiring an architectural concrete appearance
- Smooth, non-absorptive form surfaces
- Ideal for steel, fiberglass, plastic and non-absorptive overlaid plywood forms

Application Guidelines

For best results, it is recommended to apply Release Agent #10 using the Nox-Crete Excel or Perfect spray system.

Form Surface or Concrete Finish Type	Spray tip	CF Valve	Coverage rates
Non-Absorptive	800067	40psi	60-75 m ² /L
Absorptive	8001	40psi	25-35 m ² /L

Packaging & Product Codes

Part No.	Size	Pack Qty
NOXRA1020	20L	Pail
NOXRA10200	200L	Drum
NOXRA101000	1000L	Pod/Tote*

 $^{^{\}star}\,\text{Special order/\,non-stocked item--lead times apply.\,Contact your ramsetreid representative for further information.}$

Related Products

Part No.	Description	Pack Qty
NOXEXCEL	Nox-Crete Excel 130 Pro Sprayer	each – 19L
NOXPERFECT	Nox-Crete Perfect Form Sprayer	each – 10L
NOXCFVALVE40	Nox-Crete CF Valve 40 psi (Green/Blue)	each
NOXTIP8001	Nox-Crete Teejet spray tip 8001	each
NOXTIP800067	Nox-Crete Teejet spray tip 800067	each



High-performance form release agent creates architectural-grade surfaces.

Nox-Crete Excel spray system



NOTE

Using the Nox-Crete Excel sprayer is highly recommended to get the full potential of RA#10. The sprayer recommendations have been derived specifically based on the products' material properties to ensure even coverage resulting in an exceptional and economical result.

NOX-CRETE Blast-Off

A powerful water based cleaning agent formulated to dissolve concrete buildup on heavy industrial equipment.

Features & Benefits

- Contains a concentrated organic acid derived from sugar cane and sugar beets
- · Extremely fast-acting formula quickly dissolves concrete splatter and hardened build-up
- · Small molecular size allows deep penetration into the heaviest build-up
- · Water based and readily biodegradable (90% in 7 days)
- · Contains no mineral acid and is odour free

- · Produces a thick, rich foam that clings to vertical and overhead surfaces for increased effectiveness
- · Will not corrode steel, aluminium, magnesium, copper or damage plastic, fiberglass or rubber surfaces
- · Requires use of a Nox-Crete Pump Foamer
- · Vivid pH-sensitive purple dye indicates product is still working



Before application

Uses

- Use on aluminium, steel, plastic, fiberglass, glass, rubber or painted metal surfaces
- · Removes build-up and splatter on drum mixers, forms, paving machines, concrete pumps, screeds and more
- · Can also be used to remove mortar splatter, efflorescence and other calcium based salt deposits from concrete masonry surfaces
- · Excellent for small hand tools as well as heavy industrial concrete equipment



Product Information

Nox-Crete BLAST-OFF contains powerful naturally derived molecules which are extremely effective at dissolving concrete build-up and splatter without damaging or corroding exposed steel, chrome, aluminium or electrical components. Eliminates costly damage resulting from the use of sandblasters or chipping hammers, increasing the life of expensive capital equipment. It is water based and readily biodegradable allowing it to be used and disposed of safely on several work sites.

Application Guidelines

Ready to use formulation. Best results are achieved by using a pump foamers such as Nox-Crete Pump Foamer. This will produce a thick, rich foam that will cling to the steel surface allowing the product to work effectively. The pH sensitive dye indicates that BLAST-OFF is actively dissolving hardened concrete buildup, turning white when finished, allowing the user to see when the reaction is neutralized and can be easily rinsed off.

Remove softened concrete with a garden type spray nozzle of a pressure washer for removal of heavier buildup. Occasionally re-application or longer soaking times may be required for particularly heavy build-up. For extended rust protection, allow steel forms to dry and apply two coats of Nox-Crete FORMGUARD TJ to protect steel forms from rusting for up to six months.

Packaging & **Product Codes**

Part No.	Size	Pack Qty
NOXBLAST20	20L	Pail

Related Products

Part No.	Desc	Pack Qty
NOXFOAMPUMP	Nox-Crete Pump Foamer	ea
NOXFRMGRD20	Nox-Crete Formguard TJ Plus	20L



NOX-CRETE Formguard Tj Plus

High performance corrosion protection and inhibitor for steel forms.

Features & Benefits

- Excellent rust corrosion inhibitor for steel forms and equipment
- Reacts instantly with surface moisture, forming a waxy, protective coating
- Physically and chemically bonds to the steel surface
- Protects steel from corrosive effects of exterior exposure for up to 6 months
- Highly water resistant even to the corrosive effects of salt water mist
- Easy to apply with a spray pump, roller or brush
- Dries rapidly approximately 30 mins for light coatings

nox-crets





Uses

- All Precast applications for the protection of steel utility moulds
- Ideal for outdoor Precast operations and commercial and infrastructure project based mobile Precast sites
- Protects large formwork moulds such as pre-stressed single and double tee beams from rust corrosion during storage

Can be used as a high performance form release agent on moulded fiberglass column forms, dome and other geometrically challenging form shapes

Product Information

Nox-Crete FORMGUARD TJ Plus is a high performing corrosion protection and inhibitor which allows for steel forms to be stored for up to 6 months in exposed conditions with minimal deterioration. It reacts instantly with surface moisture to form a highly polymerized waxy coating that is both physically and chemically welded to the surface.

Its robust film technology makes it ideal for use in storing large outdoor steel forms and forms incorporating complex geometries, curves and/or large vertical surfaces. The polymerized film is highly water resistant even to the corrosive effects of salt water mist. A must for asset maintenance for Precast operations and large projects or mobile sites where forms may need to be stored outdoors for long periods of time.

Application guidelines

Ready to use formulation. Forms should be thoroughly cleaned and dried before applying FORMGUARD TJ Plus. Nox-Crete BLAST-OFF and Nox-Crete KEM-EX-IT are recommended for adequate cleaning and preparation of the form. Apply with a sprayer, brush or roller. Spraying is recommended for large surfaces. Typical application rate is $25-35~\text{m}^2$ per litre of product. For abrasive blasted metal and other porous surfaces, apply a second coat at the same coverage rate after 1-2 hours drying.

Packaging & Product Codes

Part No.	Size	Pack Qty
NOXFRMGRD20	20L	Pail

Related Products

Part No.	Desc	Pack Qty
NOXBLAST20	Nox-Crete Blast-Off Concrete Removal	20L
NOXKEMPLUS20	Nox-Crete Kem-Ex-It Plus Rust Removal	20L

NOX-CRETE Kem-Ex-It Plus

Chemically active solution for fast removal of rust and hardened concrete build-up on steel forms.

Features & Benefits

- Easily applied with the Nox-Crete Pump Foamer or with traditional pump sprayer
- The Nox-Crete Pump Foamer produces a thick, rich foam that clings to vertical surfaces
- · Creates a protective layer of iron phosphate on steel surfaces that protect the steel from flash rust
- · Will not damage steel forms
- Biodegradable
- · Less costly than sandblasting
- · Safe on paint, rubber, plastic and glass

Uses

Quickly removes rust and concrete splatter/ build-up on steel forms

- · Removes rust on all steel forms
- Provides short-term protection on steel forms from flash rusting







Product Information

Nox-Crete KEM-EX-IT PLUS chemically breaks down and dissolves rust and concrete build-up on steel forms, preventing costly damage to forms and equipment resulting from the use of sandblasters and chipping hammers. Softened concrete build-up and rust are easily removed with a pressure washer and steel surfaces are left with a protective barrier that temporarily protects against flash rusting.

The active solution also contains a powerful detergent to help cut through form oil residue on steel and aluminium form surfaces. Use on steel forms to remove rust and quickly remove hardened concrete buildup. It can be used to remove hardened concrete build-up from scaffolding, screw jacks, screeds, pumps and mixers.

Application guidelines

Ready to use formulation. Best results are achieved by using a pump foamers such as NOXFOAMPUMP. This will produce a thick, rich foam that will cling to the steel surface allowing the product to work effectively. Remove softened concrete and rust residue with a garden type spray nozzle of a pressure washer for removal of heavier buildup. Some scrubbing and re-application or longer soaking times may be required for particularly heavy rust. A pre-application of Nox-Crete BLAST-OFF may be required for very heavy concrete build-up. For extended rusty protection, allow steel forms to dry and apply two coats of Nox-Crete FORMGUARD TJ to protect steel forms from rusting for up to six months.

Packaging & Product Codes

Part No.	Size	Pack Qty
NOXKEMPLUS20	20L	Pail

Related Products

After application

Part No.	Size	Pack Qty
NOXBLAST20	Nox-Crete Blast-Off Con- crete Removal	20L
NOXFRMGRD20	Nox-Crete Formguard TJ Plus	20L



NOTES	

NOX-CRETE SPRAYER SYSTEMS

High quality, robust sprayers to maximise chemical delivery and performance.

Sprayer System Selection Guide

	Sprayer System	Product	Spray Tip	Environment	Application
	NOXEXCEL	BIO-NOX, RA #10	800067	Enclosed Precast facility	Steel Beds and formwork Architectural formwork
Precast NOXPERFECT		BIO-NOX, RA #10	80005	Enclosed Precast facility	Semi-absorbent formwork
	NOXPERFECT	BIO NOX. RA #10 FORMGUARD TJ	8001	Semi-exposed/ Outdoor Precast facility	Steel Beds / Railway Sleepers/ Frequent stripping/ semi-absorbent formwork
Maintenance	NOXPERFECT	FORMGUARD TJ	80005 8001	Indoor/ Outdoor	Steel formwork
	NOXFOAMPUMP	BLAST-OFF, KEM-EX-IT	N/A	Indoor/ Outdoor	Formwork and concrete equipment

NOX-CRETE Excel Precision Form Sprayer

Product Information

The Nox-Crete EXCEL sprayer is a heavy duty stainless steel sprayer and is highly recommended for the application of Nox-Crete chemicals to get a superior surface release and finish in Precast applications. The sprayer comes equipped with high quality and robust parts designed specifically for the delivery of chemicals in heavy duty manufacturing environments. The high-pressure dispersion of release agents ensures an excellent finish free from chemical staining and steaks.

Features & Benefits

- 20L stainless steel tank
- Pressurizes up to 8.9 bar (130 psi)
- Chemical-resistant seals and gaskets
- · Wide mouth easy fill tank
- 1.5 m chemically resistant hose with swivel attached to the trigger valve connector
- High-capacity in-line, 200mesh liquid filter
- 2.8 bar (40 psi) control flow (CF) valves maintain constant pressure for consistent spray flow

Uses

- · Application of Nox-Crete form release agents.
- Delivery of highly dispersed chemicals onto steel beds
- · Allows economical coverage on non-porous surafes

Produces excellent form face finish. free from chemical staining and streaks





NOX-CRETE Perfect Concrete & Form Sprayer

Product Information

The Nox-Crete PERFECT Concrete and Form sprayer is a heavy duty stainless steel sprayer for Precast, tilt-up and concrete construction sites. It can be hand pumped or air-charged to 6.2 bar (90 psi), making it a versatile and robust sprayer on large construction sites and tilt up yards for the delivery of form release agents and chemical bond-breakers.

Features & Benefits

- · Gun-style handle and trigger
- 2.8 bar (40 psi) control flow (CF) valves maintain constant pressure for consistent spray flow
- Heavy-duty, 15L stainless steel tank
- 1.5 m (5 ft.) chemical-resistant hose with swivel

Uses

- Application of Nox-Crete form release agents and bond-breakers
- Recommended for Precast and tilt up yards, as well as construction sites
- · Can be hand pumped or air charged



NOX-CRETE Hand Pump Foamer

Product Information

The Nox-Crete Hand Pump Foamer is ideal for the application of cleaning and maintenance chemicals such as Nox-Crete BLAST-OFF and Nox-Crete KEM-EX-IT Plus. It produces a thick, rich foam which clings to vertical surfaces allows greater dwell time on the surface of the form, allowing the chemicals to produce excellent results.

Features & Benefits

- Delivers thick, rich foam to maximize Blast-Off & Kem-Ex-It Plus effectiveness by extending dwell time, even on vertical surfaces
- Viton® seals for extended durability
- Wide mouth and funnel cup for easy filling
- Heavy-duty polypropylene, 7.5L (2.0 gal) tank and gun assembly



Related Products

Part No.	Description	Pack Qty
NOXCFVALVE40	Nox-Crete CF Valve 40 psi	each
NOXTIP8004	Nox-Crete Teejet spray tip 8004	each
NOXTIP8001	Nox-Crete Teejet spray tip 8001	each
NOXTIP80005	Nox-Crete Teejet spray tip 80005	each
NOXTIP800067	Nox-Crete Teejet spray tip 800067	each
NOXSERVICE-PF	NoxPerfect Spare Part kit	each
NOXSERVICE-EX	NoxExcel Spare Part kit	each

Packaging & Product Codes

Part No.	Size	Pack Qty
NOXEXCEL	20L	ea
NOXPERFECT	15L	ea
NOXFOAMPUMP	7.5L	ea

NOTE

Using the complete nox-crete sprayer system is highly recommended to acheive the full potential of nox-crete form release agents and maintenance chemicals. The sprayer recommendations have been derived specifically based on the product material properties to ensure and exceptional and economical result.



SEALANTS & ADHESIVES

Essential preparations, repair and installation chemicals for the full precast solution.

Formwork

Form Seal Silicone Sealant

Neutral cure, quick skinning, low adhesion silicone for all formwork requirements.

Part No.	Description	Pack Qty
FMSLG300A	Formseal Silicone Sealant Cartridge	300ml
CAGU300	Caulking Gun for 300ml Cartridge	each



Foams

Ramset™ Expanding Foams for sealing around formwork.

Part No.	Description	Pack Qty
FMFLG500	Compfill Solf Evanading Con Filling Foom	500g
FMFLG750	Fomofill Self-Expanding Gap Filling Foam	750g
FMPLG750	Fomoplus 750ml Canister	750g
FMSVM500	Fomo Aerosol Solvent Cleaner for FomoPlus Applicators	500ml
FMPLGU300	Fomoplus Applicator Gun Metal	each



Repair

Epoxy Repair

Tough, durable and specially formulated for strong bond to concrete.

Part No.	Description	Pack Qty
EP1210L4	Enovy Poeto 1210	4L
EP1210L20	Epoxy Paste 1210	20L
EP7042L3	France Crout 7049 Standard Cura	3L
EP7042L13	Epoxy Grout 7042 Standard Cure	13L





Installation

CHEMSET™ BOI XTREM™

High bond, quick setting adhesive with seismic approval for post-installed anchor studs.

- · Sustained loading
- Approved for cracked concrete and seismic applications
- Quick setting (50mins @ 20°C)
- High bond strength

Part No.	Description	Pack Qty
C801C	ChemSet 801 Xtrem Heavy Duty Vinyl Ester	380ml
C801J	Anchoring Adhesive & 2 x Mixer Nozzle	750ml
ISNE	Mixer Nozzle for ChemSet 801 Xtrem	5/pack
CUAP	Chemset Universal Applicator	each



CHEMSET™RE0 502

Extra heavy duty anchoring of reinforcing bar and threaded studs into solid concrete and stone. Quick setting for improved productivity. Structural reinforcing bar connections in slabs, columns, beams and walls. Structural steel columns, raker angles, seating.

- Pure Epoxy high bond strength adhesive
- Cures in 3 hrs (@ 20° C)
- Ideal for reinforcing bar connections in solid concrete
- Quick loading time maximises productivity

Part No.	Description	Pack Qty
RE0502J600	ChemSet Reo502 (600ml) + Mixer Nozzle	600ml
RE0502EF600	ChemSet Reo502EF (600ml) + Mixer Nozzle	600ml
ISNE	Mixer Nozzles for Reo502	5/pack
CUAP	Chemset Universal Applicator	each





formwork system

The Spartan™ Formwork
System brings innovative,
smart technology to
the pre-cast yard which
allows imagination the
freedom of full expression
in the physical structure

Central to the Spartan Formwork System is the Titan™ Magnet Clamp and Spartan Sideform which provide unparalleled levels of accuracy, flexibility, efficiency and safety to pre-cast yards.

Smarter.

Easier.

Stronger.

Safer.





Spartan™ System

Spartan is the complete Precast Formwork solution.

The Spartan Formwork System brings innovative, smart technology to the precast yard and allows imagination the freedom of full expression in the physical structure.

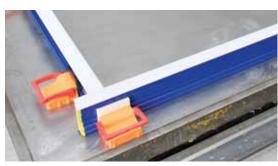
Central to the Spartan Formwork System is the Titan™ Magnet Clamp and Spartan Sideform. Together, these products provide unparalleled levels of accuracy, flexibility, efficiency and safety to precast yards.





Smarter.

Spartan Sideform is the only system that enables precasters the flexibility of incremental changes in height with the simple change-over of capping. The Spartan Rubber Base Insert provides a silicone-free seal between the bed and formwork to prevent concrete bleed – eliminate the material and labour costs associated with the silicone application and removal processes.





Easier.

The new Spartan Internal Corners provide quick and easy set up of penetrations including doorways and windows in precast panels, allowing the precaster to eliminate use of expensive and environmentally harmful polystyrene.



Stronger.

Spartan Sideform is manufactured from ultra lightweight, highgrade 6082 and 6005A Aluminium Alloys which provides durability and strength. Spartan Sideform will not bend or buckle and can withstand job site use and abuse. The Titan Magnet Clamp is the industry's most powerful. It's ultra compact design saves space and enables precasters to maximise the working area of a steel bed.





Safer.

The Titan Precast Magnet Clamp's de-magnetising plate safely secures the magnet to prevent it from unexpectedly engaging on the steel bed – minimizing the risk of fingers or other limbs being caught under the magnet. Spartan Sideform's innovative aluminium design is significantly lighter than traditional steel formwork, improving OH&S and making it much safer to use.



Spartan™ Sideform

The patented Spartan
Sideform is manufactured
from a unique
combination of composite
materials and offers
a multitude of benefits
over traditional steel
or wood formwork.

Lightweight: Spartan Sideform is significantly lighter than steel formwork reducing any potential OH&S issues.

Thick wall sections: Sideform will not bend or buckle. Thick wall sections provide for proper screw bite when fixing fittings to the sideform.

Centre line marking: Spartan Sideform provides a horizontal line-of-centre to assist with the alignment or positioning of fittings.

Easy to Clean: Powder coated Spartan Sideform can be easily cleaned and is protected against the elements.

- Magnet Securing Rail on the rear of Spartan Sideform does not allow concrete to become wedged and is easily removed.
- Sideform is colour-coded to reflect the variations in height.
- Spartan Sideform accommodates interchangeable top capping for height and profile flexibility.
- The Spartan Sideform also houses the unique Rubber Base Seal which prevents concrete bleed without the need for use of silicone

Part No.	Colour	Dimensions (LxH)	Weight (kg)
SF125	Green	5.8m x 125mm	17.7
SF150	Grey	5.8m x 150mm	20.0
SF175	Blue	5.8m x 175mm	22.4
SF200	Burgundy	5.8m x 200mm	24.7
SF250	White	5.8m x 250mm	33.9
SF300	White	5.8m x 300mm	38.6



Spartan™ Sideform Rubber End Caps

Spartan End Caps provide a silicone free join between sideform sections, preventing concrete bleed through gaps in temporarily joined sideform.

Likewise, the Spartan End Caps plug the ends of the sideform, preventing any concrete from filling the internal cavities.

The Spartan Sideform End Caps now feature a taper or draft which makes stripping of both internal and external corners even easier!

Part No.	Suits
SFEC150	SF150 Sideform - Left and Right Pair
SFEC175	SF175 Sideform - Left and Right Pair
SFEC200	SF200 Sideform - Left and Right Pair
SFEC250	SF250 Sideform - Left and Right Pair
SFEC300	SF300 Sideform - Left and Right Pair











Spartan ™ Sideform Capping

The Spartan Sideform Capping provides precasters with the flexibility to change sideform height and profile, without the need to invest in entirely new sideform. Available in 6 sizes ranging from +0mm to +25mm in 5mm increments, the Spartan Top Cap simply snaps on to the sideform, and snaps off as required.



Square - I2 x I2 Profile

Part No.	Colour	Dimensions (LxH)
CAPSQ00	Light Grey	3m x 0mm

Chamfer - I2 x I2 Profile



Part No.	Colour	Dimensions (LxH)
CAPC12	Grey	3m x 0mm
CAPC1205	White	3m x 5mm
CAPC1210	Green	3m x 10mm
CAPC1215	Burgundy	3m x 15mm
CAPC1220	Orange	3m x 20mm
CAPC1225	Navy	3m x 25mm

Spartan TM Rubber Base Inserts

Not all steel beds are perfectly flat and small gaps do appear between the underside of the sideform and the

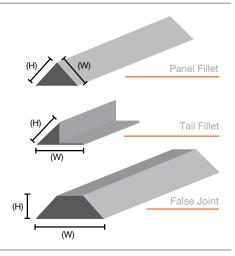
bed. These can cause concrete bleed or seepage. Traditionally, a bead of silicone is used between the sideform and the steel bed - a labour intensive and cost prohibitive exercise.

Part No.	Profile	Colour	Lengths
BIC12	12mm Chamfer	Black	6m
BICSQ	Square	Black	6m



Reid™ Extruded Sections

Description	Part No.	Nom Size (W x H)	Length (mm)	Pack
	FILLET12S	12 x 12	3000	25
Panel Fillet	FILLET15S	15 x 15	3000	25
	FILLET17S	17 x 17	3000	25
Tail Fillet	FILLET12T	12 x 26	3000	25
ran rinet	FILLET15T	15 x 37	3000	25
	MOCK12	12 x 40	3000	10
False Joint	MOCK15	15 x 40	3000	10
	MOCK 17	17 x 50	3000	10





Titan™ III Magn∈t Clamp

The Titan III patented Precast Magnet is Australia's strongest magnet for its size and is significantly smaller than other commercially available magnets:

Smaller and lighter: Weighs just 4.1kgs

Stronger: Up to 1,800kgs of pull-down force!

Rubber Base Skirt: Fully seals the underside of the housing to protect against dirt, metal particles and other contaminants. The Rubber Skirt also minimises the possibility of fingers or limbs being caught under the magnet.



it from unexpectedly engaging against the steel bed. **Easy to Clean:** Concrete does not

stick to the magnet's plastic housing, making it quick and easy to clean. **Durable:** The 8mm reinforced

Reid™ recommends the use of water based release agents.

plastic housing is job site tough!

Part No.	Colour	Dimensions
MAG3	Orange/ Red	140mmL x 155mmW x 85mmH

Titan™ Magnet Adapter Plates

The Titan range of Magnet Adapter Plates are the crucial link in the Spartan Formwork System, enabling quick and easy interchangeability of the magnet between sideform of varying size.

Part No.	Suits	Dimensions (LxWxH)
MAP125	SF125	145 x 20 x 85mm
MAP150175	SF150 & SF175	145 x 20 x 110mm
MAP200	SF200	145 x 20 x 160mm
MAP250	SF250	140 x 30 x 170mm
MAP300	SF300	140 x 30 x 220mm





Spartan Sideform Joiner Plates

Spartan Joiner Plates are used for temporary or semi-permanent joining of sideform and used for joining the Spartan Internal Corner system.

Part No.	Colour	Suits
SFJP150200	Silver	SF150, SF175, SF200, SF250, SF300



Titan Ball Lock Rail Strip

The Titan Ball Lock Rail Strip (BLRS) screws onto other sideform systems, adapting it for use with the Titan Magnet Clamp or with the Titan Screw Fix Bracket (TSFB).

Part No.	Colour	Dimensions (LxWxH)
BLRS	Yellow	155mm x 10mm x 42mm



Titan Screw Fix Bracket

The Titan Screw Fix Bracket (TSFB) can be used as an alternative to the Titan Magnet Clamp and is ideal for semi-permanent set up of sideform.

The TSFB simply screws into the bed with the use of a single screw. The Magnet Adapter Plate is attached in the same manner as the Titan Magnet Clamp.

Part No.	Colour	Dimensions (LxWxH)
TSFB	Silver	75mm x 6mm x 10mm



Panel ID Plates

Cast into panels for clear identification, specifications and quality control details. Available in several colours. ID Plates are 180mm x 100mm, and come in packs of 60 or pallets of 4,480 units.

Part No.	Colour
FWPLATEBL	Blue
FWPLATEW	White
FWPLATEGN	Green
FWPLATEO	Orange
FWPLATEY	Yellow



NOTES:

erection & installation

With many precast elements, and panel elements, there will be a need to provide temporary support in the form of braces or props to hold the element safely in position until the rest of the surrounding structure is complete and locks the element in its final position.

Reid provides solutions for Propping and placement with a range of AS3850 compliant Bracing Anchors and Shims.

Once the element is in place, a common headache on site is getting bolted connections lined up with cast in holes. OrbiPlate is the solution for connection steel to steel or steel to concrete elements, delivering connections tolerances of up to 20mm.



OrbiPlate™

OrbiPlate overcomes the major headache that comes with bolted connections, getting the holes to line up! The methods traditionally used to overcome this were time consuming, costly and often structurally inadequate.

The patented OrbiPlate system is used when connecting steel to steel or steel to concrete elements and delivers connection tolerances of up to 20mm around the centre of the connection. It also provides the ability to achieve fine locational accuracy when positioning each steel member.

OrbiPlate is quick and easy to install. The steel member is supplied to site with a pre-formed hole (70mm), which can be punched or cut at the centre of the connection location. The main washer is then placed over the hole, rotated to locate the slot over the ferrule, then secured using the class 8.8 bolt through the small washer. The bolt can be positioned anywhere along the elongated slot, providing up to 20mm tolerance in all directions.

Features & Benefits

- Utilises readily available Reid[™]
 Elephant Foot[™] ferrules for steel
 to concrete connections.
- OrbiPlate is made from high tensile steel.
- Hot Dip Galvanised finish.
- It is comprising of two washers (one large and one small) and is supplied with a M16 or M20 class 8.8 bolt.
- Capacity is limited to either the ferrule cast into the concrete or the class 8.8 bolt*.

Advantages

- · No lost time.
- No hot work, either blowing out holes or welding.
- No call outs when connections don't line up.
- OrbiPlate locks in place.
- Fine positional adjustment allows accurate positioning of each steel member.
- OrbiPlate provides a high capacity structural connection*.



Provides ± 20mm positional tolerance. No rework or call outs when connections don't line up.

*Refer to the OrbiPlate Engineer's Design Guide for design capacities for both steel to concrete & steel to steel applications.

Product Codes

OrbiPlate fits into a pre-formed hole in steel component (diameter 70mm \pm 1mm)

Part No.	Size	Finish	Matching Ferrule	Fixture Thickness
ORB2016BGH	M16	HDG	FE16095GH	6 - 12mm*
ORB2020BGH	M20	HDG	FE20095GH	6 - 16mm*

^{*} For use with a greater fixture thickness, please consult your local Project Engineer.



R∈id™ BraceSet™ **Bracing Anchor**

Reid BraceSet Bracing Anchor is the ideal solution for anchoring the slotted feet of concrete wall panel braces, at either end of the brace.

BraceSet is a Heavy Duty load controlled torque setting expansion anchor, using a common 30mm AF hex head socket. Compliant to AS 3850.1:2015, BraceSet provides high tensile and shear capacities (Tensile capacity (kN) of 16.2). Ideal for use at either end of the precast panel brace, it is simple to remove leaving no messy protrusions.





Large 30mm AF head and 38mm washer.

Bolt head spans the brace foot slot structurally, does not rely on the fitting of a separate washer.

High shear capacity for a 20mm diameter anchor. 16mm diameter shear zone gives upto 5% higher shear capacity than M12 based bolts.

Pull down sleeve ensures fixture clamping. If required, the pull down sleeve reduces in height, drawing the fixture down tight against the substrate.

Locking cone nut engages the concrete. Reliable clamp load creation means consistently higher capacity.

BraceSet Bracing Anchor Key Features:

- Heavy Duty load controlled torque setting expansion anchor.
- High tensile and shear capacities.
- Uses a common 30mm AF hex head socket.
- 20mm diameter drilled hole.
- Ideal for use at either end of the precast panel brace.
- Simple removal leaving no messy protrusions.

Installation details

Concrete drilled hole diameter	Maximum fixture thickness	To suit bracefoot slot width	Tightening torque	Minimum dimensions		;
(mm)	(mm)	(mm)	(Nm)	Anchor edge distance e _c (mm)	Anchor spacing a _c (mm)	Substrate thickness (mm)
20	25	21 - 26	150	300	500	150^

Part No.	Description	Anchor Size (mm)	Drilled Hole Diameter (mm)	Tightening Torque (Nm)	Pack Qty
BA20115	Reid BraceSet Bracing Anchor	M14	20	150	40



Reid TM Footed Bracing Ferrule & Coil Bolt

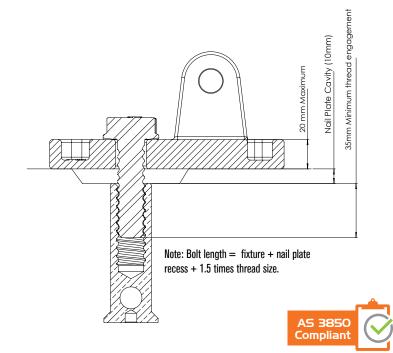
Reid Footed Bracing Ferrule is specifically designed for use with the Reid Coil Bolt for bracing applications. Manufactured from Class 5.8 steel, the footed bracing ferrule is suitable for use in near or far face applications with the Reid range of accessories. The footed design ensures maximum concrete capacity without the need for a cross bar.

The Coil Bolt is designed with a coil thread to provide maximum tolerance to concrete slurry and to enable fast secure installation. The flanged head coil bolt has a 38mm serrated washer face that suits slotted plates.



Footed Bracing Ferrule Key Features:

- Class 5.8 steel.
- Use in near or far face applications with the Reid range of accessories.
- Footed design ensures maximum concrete capacity without the need for a cross bar.
- May be used with rebar for fixing to mesh.
- Reid[™] logo and material grade stamped on ferrules.



Part No.	Description	Ferrule OD (mm)	Ferrule length, L (mm)	Thread length, Lt (mm)	Cross hole to suit
CBF2095	Reid Footed Bracing Ferrule	28	95	38	N12

Part No.	Description	Thread Length	Pack Qty
CBW2065	Reid Coil Bolt	62	50

Accessories:

Bracing Ferrule Nailing Plate

Part No.	To Suit	Pack Qty
NPCBI	Reid Footed Bracing Ferrule	100

NOTES:

ramsetreid



RapidBrace

RapidBrace is a cast in solution primarily designed for fixing brace feet bracket of concrete wall panel braces in low strength concrete.

The internally threaded Rapid Foot is cast into the floor along with the void tube, designed to accept RB12 ReidBar "bolt" to secure the brace feet bracket.

Features:

- Safe, flexible and quick cast In solution
- Full bar break connection in low strength concrete
- Reduce floor cycle times
- Fully tested to AS 3850.1:2015
- Use for bracing, handrails and safety screens.

Rapid Brace Components

Part No.	Description	Product Image Key
RVT20	Reid Void Tube 3m Length	1
RAPIDB	RapidBrace Tripod and Spacer Disc	2a and 2b
RAPIDWN	RapidBrace Wing Nut RB12	3
RAPIDF	RapidBrace Foot For RB12	4
RB12N	RB12 Nut	5
RB12SB	RB12 ReidBar Starter Bar	6
LIFEGUARD 12-20	Life Guard Protective Cap	7







Reid™ Shims

Reid Shims have been independently tested and rated with a 20t Working Load Limit determined in accordance with AS 3850.1:2015.

Key Features:

- Reid Shims are permanently market with 20t WLL and the Reid logo for identification.
- Designed for temporary levelling support for panels.
- Colour coded by thickness for ease of selection, Reid Shims are manufactured from quality plastic and tested with compressive tests up to 20 tonnes.









Part No.	Shim Thickness (mm)	Dimensions	Colour	Pack Qty
SHIM01	1	150mm x 100mm	Brown	100
SHIM02	2	150mm x 100mm	Blue	200
SHIM03	3	150mm x 100mm	Green	100
SHIM05	5	150mm x 100mm	Yellow	100
SHIM10	10	150mm x 100mm	Black	40
SHIM15	15	150mm x 100mm	Grey	40
SHIM20	20	150mm x 100mm	White	30

N	O ⁻	ΓΕ	S:

architectural solutions

The ability of reinforced concrete to take virtually any shape that an architect can visualise is probably the single most important characteristic that has made it a dominant construction material of the modern age.

Ramsetreid Architectural Solutions bring together a stable of innovative architectural systems and technologies which are sustainable and cost-effective.







graphic concrete® offers a new way to produce a patterned concrete surface. The patented technology involves applying a surface retarder to a special membrane.

The pattern on the concrete surface results from the contrast between the smooth face and the exposed aggregate finish.

Choose a pattern from an existing Graphic Concrete collection, or design your own.



For over 30 years, Fitzgerald Formliners has been developing and manufacturing the most technically advanced form liners.

Fitzgerald offers the most innovative products and latest manufacturing methods available.

From design through to the final product, Fitzgerald's attention to detail and quality engineering will guarantee a creative and cost-effective architectural finish for your next project.



NirvanaTM Insulated Concrete Panels combine the energy efficiency of insulation with the thermal mass and structural integrity of concrete, to produce buildings that are both comfortable and sustainable.

Nirvana insulated panels are commonly used for residential housing and commercial construction such as libraries, schools, prisons or office complexes.

graphic concrete

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© graphic concrete®

What is graphic concrete?

Graphic Concrete. provides technology for architects in the design process and for the prefabrication concrete industry to manufacture high-quality patterned concrete surfaces. Builders use these surfaces in industrially produced façades, floors and inner walls.

graphic concrete is a patented technology invented by interior architect Samuli Naamanka. The technology is a proven concept within the precast concrete industry.

An extensive number of completed projects from all over the globe demonstrate the vast range of designs in which architects can use graphic concrete: public, residential and industrial. When an architect decides to use graphic concrete in the design of a concrete surface, the visual quality of the traditional surface is radically altered.

How does graphic concrete work?

graphic concrete technology is the printing of a surface retarder on a special membrane. Concrete is cast on top of the membrane and the retarder slows the setting (hardening) of the concrete in the selected areas. The unset, softer concrete surface is high pressure washed, revealing the fine aggregate finish.

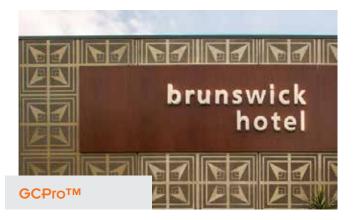
The actual pattern on the surface of the concrete then results from the contrast between the smooth finish and the aggregate. Colour pigments can be added to white cement and aggregates of different colours can be used.

Casting of the concrete elements takes place in a precast yard. The membranes printed by Graphic Concrete Ltd are available from Reid and are delivered to the precaster whom is specifically chosen for the project by the architect, developer or builder.

More freedom and options for architects: graphic concrete allows you to use concrete in new and stylish ways; add the desired effect to a concrete surface by selecting a pattern from one of the Graphic Concrete collections, or develop your own unique design.











Graphic Concrete® Gallery

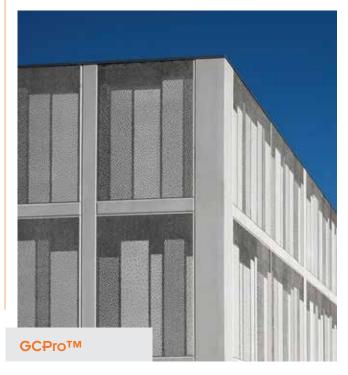
Four different ways to use graphic concrete.

GCCollection comprises almost a hundred ready-made repeating patterns that can be customized and scaled according to the designer's wishes to create a unique look. Designers can also create their own repeating pattern, which we call GCPro. To create large designs using photographs or other non-repeating patterns, we offer GCArt&Design. Finally, GCSmooth offers a beautiful velvety smooth and even concrete surface without a pattern.





GCProTM represents unique patterns designed by architects and designers. These patterns are exlusive, designed to match a specific project bringing the design all the way to the concrete surface.







More freedom and options for architects: graphic concrete allows you to use concrete in new and stylish ways; add the desired effect to a concrete surface by selecting a pattern from one of the Graphic Concrete collections, or develop your own unique design.







⑤ graphic concrete®

fitzgerald formliners

For over 30 years,
Fitzgerald Formliners
has been developing
and manufacturing
the most technically
advanced form liners.
Fitzgerald offers the most
innovative products and
latest manufacturing
methods available.

From design through to the final product, Fitzgerald's attention to detail and quality engineering will guarantee a creative and cost-effective architectural finish for your next project.





Fitzgerald Formliners

The Finest Architectural Concrete Begins With The Best Formliner. ramsetreid are proud Australian distributors of Fitzgerald Formliners.

Fitzgerald Formliners pride themselves on the design and manufacture of the best formliners in the industry, focusing their efforts solely on the continuous improvement on their products. Architects, engineers, designers and construction contractors have chosen Fitzgerald Formliners more often than any other company.

Fitzgerald's proprietary products - Vac-U-FormTM, Vinylok®, FitzLokTM - are the most innovative formliners available in the

construction market. With more than 250 standard and custom patterns, Fitzgerald Formliners offer an unrivaled variety of design options and possibilities. These patterns include fluted ribs, fractured ribs, masonry, sandblast, stone, wood, geometric shapes and our unique brick gasket systems.

From conceptual design through to the final product, Fitzgerald Formliner's attention to detail, quality and engineering guarantees the most creative and cost-effective solution for your project.

Formliner Types



Vac-U-Form™

Single or Multi-use Vacuum Formed Plastic Formliners

Vac-U-Form liners allow for cost effective architectural detail for tiltup, cast-in-place or precast applications. They are ideally suited for small or medium areas of coverage where only limited or a single use of the liner is required.



VinyLok™

Interlocking Trapezoidal Extruded Plastic Formliners

VinyLok formliners can be extruded in lengths of up to 12 metres for use in tilt-up, precast and cast-in-place concrete applications. This unique interlocking system provides the ideal solution for projects where seamless finishes are required.



FitzLokTM

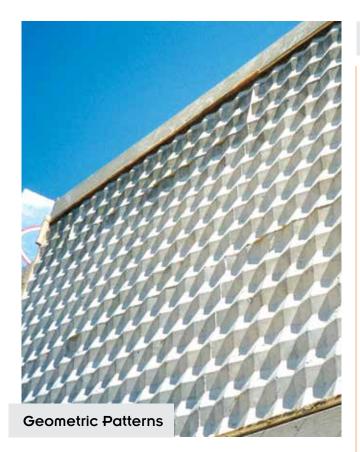
Interlocking Seamless Formliners

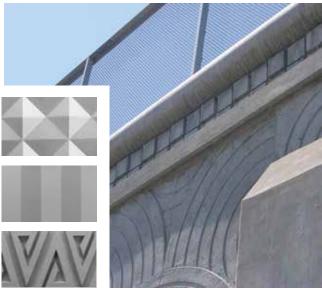
FitzLok single use interlocking formliner panels provide a seamless, simulated, smooth brick or block masonry finish. FitzLok formliners reduce labour time by allowing you to quickly and easily "snap" formliners together.

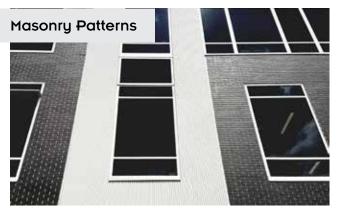


Fitzgerald Formliners Gallery

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Fitzgerald Formliners' simulated masonry patterns are used when the realistic look of brick or masonry block is desired. They are available in a wide range of sizes and textures that provide many design solutions.

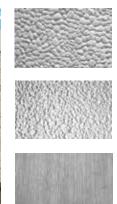




Fitzgerald Formliners' wooden plank textures create the aesthetics of natural board finishes. You can choose light, medium or heavy grain finishes. They are a cost effective solution to old-fashioned board form applications.











nirvana insulated panels

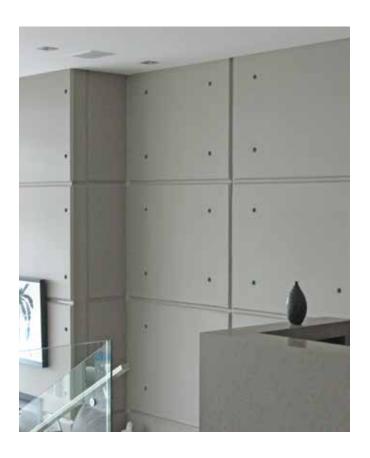
Nirvana™ Insulated
Concrete Panels combine
the energy efficiency of
insulation with the thermal
mass and structural
integrity of concrete, to
produce buildings that
are both comfortable
and sustainable.







Insulated Concrete Panels for Energy Efficiency



Reid™ Nirvana™ insulated sandwich concrete panel system maximises thermal efficiency by combining insulation with the high thermal mass properties of concrete.

Nirvana insulated panels are commonly used for residential housing and commercial construction such as libraries, schools, prisons or office complexes. Nirvana is best suited in situations where outside temperatures reach extreme levels, because of its ability to moderate temperature fluctuation inside the building.

How the Nirvana Insulated Concrete Sandwich Panel System Works

Nirvana Insulated concrete panels combine Reid expertise in concrete anchoring technology with the science of heat transfer. Nirvana connector pins lock in a thickness of insulation between two concrete layers (wythes) to produce a wall with exceptional resistance to heat transfer, which can be lifted, erected, and installed as a single unit.

The internal concrete wall provides the structural strength and thermal mass, the insulation layer reduces the flow of heat energy into or out of this thermal mass, and the external wall provides physical protection to the insulation layer. By varying the thickness of each layer, different structural and thermal properties can be achieved.

Nirvana connector pins possess a circular cross-sectional area, providing confidence that correct orientation of the pin during installation will not become an issue. Tests have shown that using a Nirvana pin provides more than sufficient strength against pull-out failure. The pins are made from an epoxy-backboned vinylester resin system and are placed in a grid pattern during set-up of the panel.

Designing with Nirvana

Effective design can dramatically improve the performance of buildings during construction and service life.

The many different elements work as a closed system, interacting to either enhance their function or detract from original designs. Good design will achieve substantial savings in building construction and operational costs, while providing a comfortable indoor environment and desirable aesthetics.





Connector Pins

Nirvana connector pins are manufactured from pultruded glass fibre/resin composite,

providing exceptional tensile and flexural strengths, with low heat conductivity and high heat capacity.

These heat transfer properties are particularly important, otherwise the pin will form a thermal bridge between concrete layers, greatly reducing the R-value. Specification of connection pins must first consider their length, which must be sufficient to span the insulation layer and provide appropriate embedment within each concrete layer of the panel.

The number of pins required to support the weight of the external concrete layer and resist the bending moments ("lever arm" formed over the distance between each layer of concrete) will determine the distance between individual pins. More pins will be required around edges and penetrations such as windows and doors.

Structural Design

All structures require correct design to ensure they will withstand the forces exerted during their service life.

This includes the weight of the structure, wind loads (especially in cyclonic regions), seismic loads and any other dynamic forces that could be experienced. The internal concrete face of a Nirvana panel forms the structural load-bearing wall, and contains lifting anchors for moving into place, connection points for fixing, and steel reinforcing bar and mesh to support the structure throughout its life.

In addition to these typical applications, this internal section has a layer of insulation and an external concrete face attached to it through the Nirvana connector pin. These high tensile pins are embedded into the internal concrete layer during manufacture and anchor the insulation and external concrete face tightly to the structure to prevent delamination and separation of the panel layers.

Reid can design the spacings of the connector pins to safely hold the weight of these two external layers firmly in place.

Insulation Thickness

The effectiveness of insulation is dependent on the type of material and its thickness. The Nirvana system can be used with many varieties of insulation to suit your performance requirements and budget.

Once selected, the R-value (thermal resistance) of the Nirvana panel can be varied by altering the thickness of the insulation.

By doing so, the Nirvana panel can be designed to achieve a specific R-value to meet National Construction Code (NCC) requirements. However, as NCC guidelines are a minimum requirement only, higher R-values may be used if greater financial benefit can be realised.

Thermal Mass

Thermal mass or "heat capacity" refers to the amount of heat energy required to induce a change in temperature in a material.

The structural wall of the Nirvana system provides a high thermal mass, where heat energy passing into or out of it is limited by the insulation component of the system.

This mechanism allows the Nirvana system to be engineered such that the internal wall temperature will never rise excessively. This will maintain comfortable temperatures indoors, and greatly reduce heating and cooling requirements throughout the changing seasons.





customer service

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