JOINT FORMER SYSTEM

Technical Data & Specifications

Swiftcore

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Swiftcore™ JOINT FORMER SYSTEM

THE FORMER THAT JUMPS WITH YOU.

OVERVIEW

The Swiftcore Joint Former System is one of the quickest and most effective ways to install reinforcement at construction joints in concrete.

This system consists of a specialised rebate former that is fixed to the inside face of the external shutters and can remain fastened for the duration of the project when repeating typical floors. It's 'plug, shut and tie' design speeds up the process of floor jumps and removes the need to set up joint connections for every level.

The Rebate Former is designed to ensure anchor bars are positioned accurately while securing and protecting them during the concrete pour. The method is proven to expose perfectly finished rebates and easy to access couplers, ensuring future connections of walls and floors is seamless.

BENEFITS

- **Set up once for typical floors**
- **Less labour intensive than traditional methods**
- **Significant time & cost savings**

COMPLIANCE

The Joint Former System is used in conjunction with Swiftcore Couplers. The couplers are friction welded to grade 500N ACRS approved reinforcing bars with a minimum yield of 500MPa which meets the AS/NZS 4671:2001 requirements. All bars have a minimum uniform elongation A.gt 5% and are bent to comply with AS/NZS 4671:2001.

The mechanical performance of Swiftcore Couplers have been tested by a NATA approved laboratory and meet AS/NZS 4671:2001 requirements.

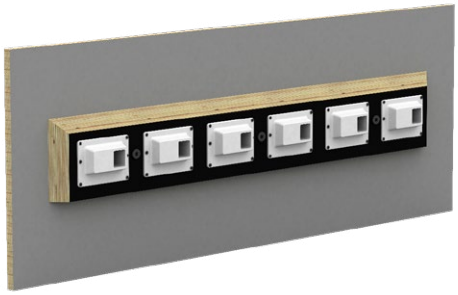
APPLICATIONS

The Joint Former System is specifically designed for jump forms and can be suitable for a wide range of construction joints in concrete, commonly including:

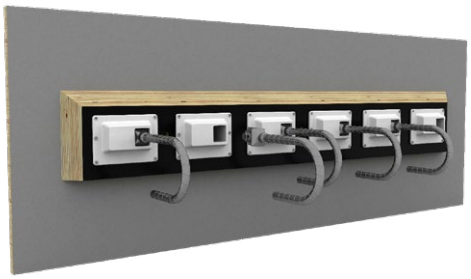
- **Jump Forms**
- **Walls**
- **Diaphragm Walls**
- **Stairwells**
- **Floor Slabs**
- **Corbels**

JOINT FORMER INSTALL GUIDE

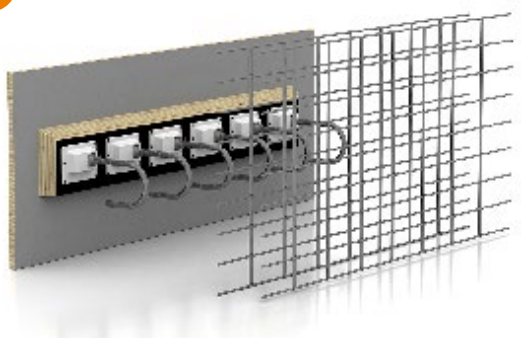
1 FIX TO FORMWORK



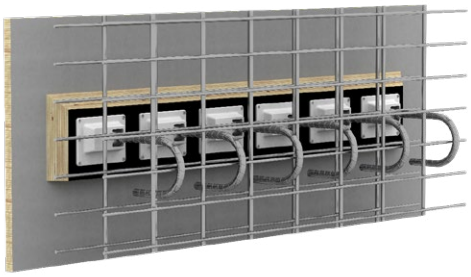
2 INSERT ANCHOR BARS



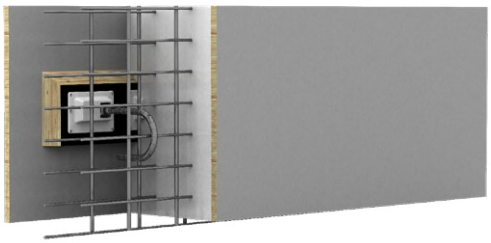
3 FIX REBAR



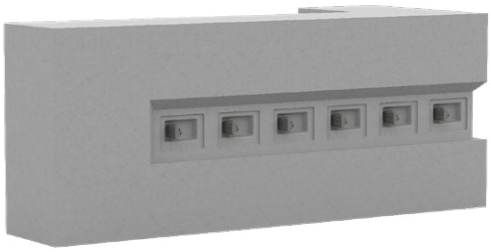
4 CLOSE SHUTTER & FINAL FIXING



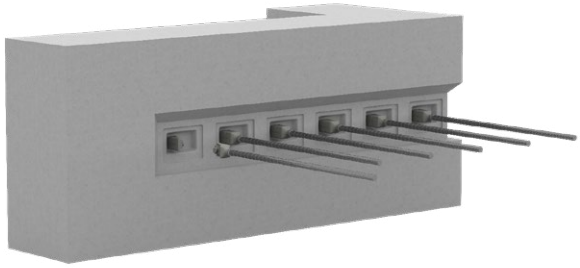
5 POUR WALL CONCRETE



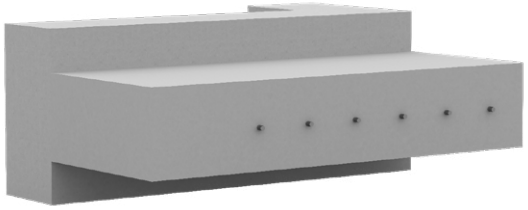
6 REMOVE FORMWORK



7 CONNECT & TIE STARTER BARS



8 FIX STEEL & POUR CONNECTING SLAB

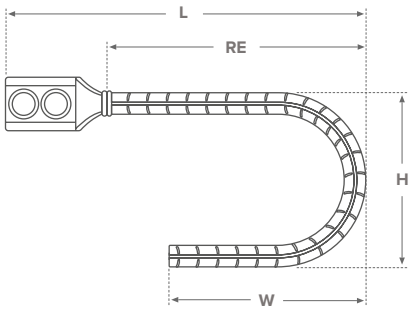


ANCHOR SPECIFICATIONS

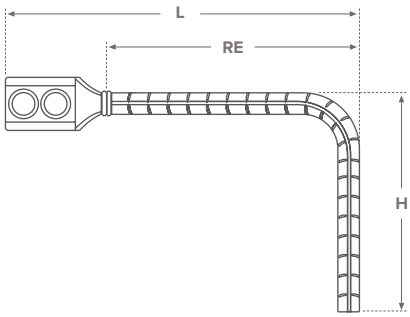
OVERVIEW

Anchor bars are available in 16mm, 20mm & 24mm diameters with the option of both U & L shapes. Swiftcore Couplers are friction welded to 500N ACRS certified reinforcing bars and bent to comply with AS/NZS 4671:2001.

U SHAPE



L SHAPE



ANCHOR SPECIFICATIONS

			RE	L	H	W					
Anchor Bar Size (mm)	Product Code	Rebar Shape	Rebar Embedment (mm)	Anchor Length (mm)	Cog/Hook Length (mm)	Hook Return Length (mm)	Min Wall Thickness (mm)	Concrete MPA	Restraint (kN)	Pull Out Restraint (kN) at Spacings Per Metre	
										200	250
16	ANCHOR16-L	L	200	270	205	-	300	25	198	990	792
								32	224	1120	896
16	ANCHOR16-U	U	200	270	130	130	300	25	198	990	792
								32	224	1120	896
20	ANCHOR20-L	L	250	333	245	-	363	25	307	1535	1228
								32	347	1735	1388
20	ANCHOR20-U	U	250	333	150	150	363	25	307	1535	1228
								32	347	1735	1388
24	ANCHOR24-L	L	300	397	295	-	407	25	425	2125	1700
								32	481	2405	1924
24	ANCHOR24-U	U	300	397	180	180	407	25	425	2125	1700
								32	481	2405	1924

Single Anchors with no edge distance or crowding of cones effect based ACI 355 1R 1997 State of the Art report on anchorage to concrete.

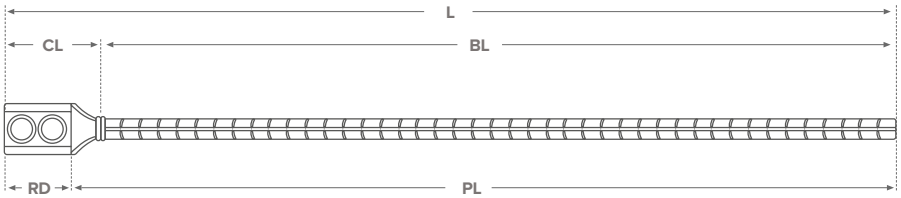
TIE WIRE REQUIREMENTS

All 16mm, 20mm & 24mm connected couplers requires 1 tie wire at a minimum diameter of 1.5mm. This is to be tied around the coupler and sit within the moulded wire grooves at each corner.

STARTER BAR SPECIFICATIONS

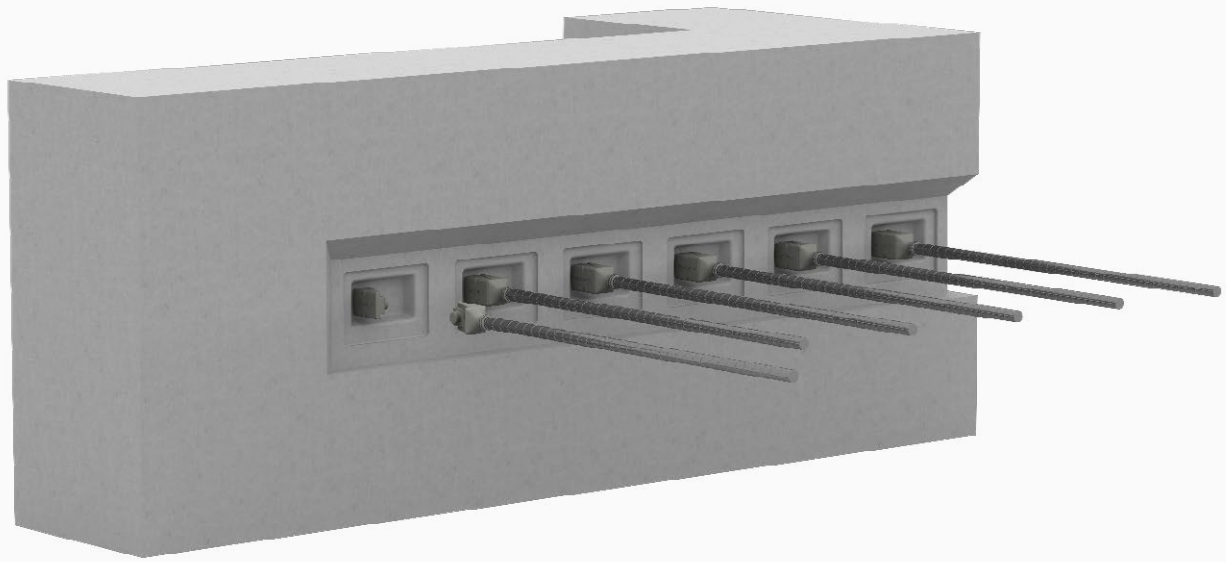
OVERVIEW

Starter bars are available in 16mm, 20mm & 24mm diameters. Swiftcore Couplers are friction welded to 500N ACRS certified reinforcing bars and comply with AS/NZS 4671:2001.



STARTER BAR SPECIFICATIONS

		CL	RD	PL	BL	L	
Rebar Diameter (mm)	**Product Code**	**Coupler Length (mm)**	**Rebate Depth (mm)**	**Protruding Length (mm)**	**Bar Length (mm)**	**Total Length (mm)**	**Load at Nominal Yeild (kN)**
16	STARTERBAR16	70	34	421	400	470	98
20	STARTERBAR20	83	34	525	500	583	154
24	STARTERBAR24	97	34	629	600	697	222

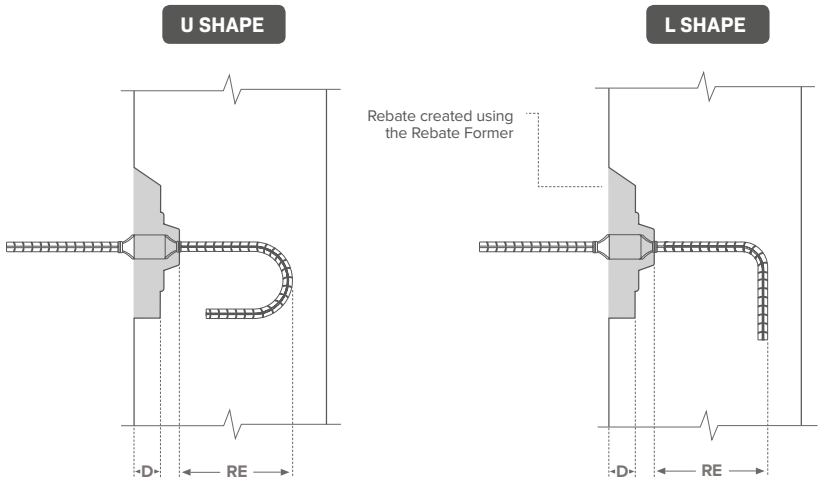


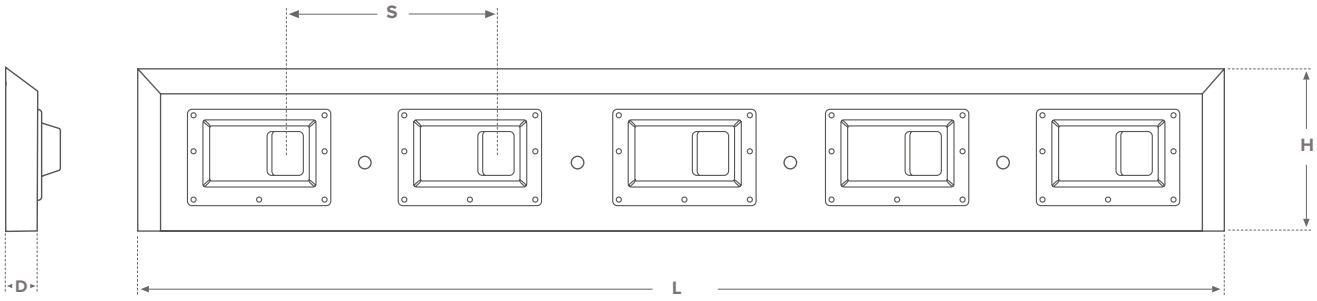
REBATE FORMER SPECIFICATIONS

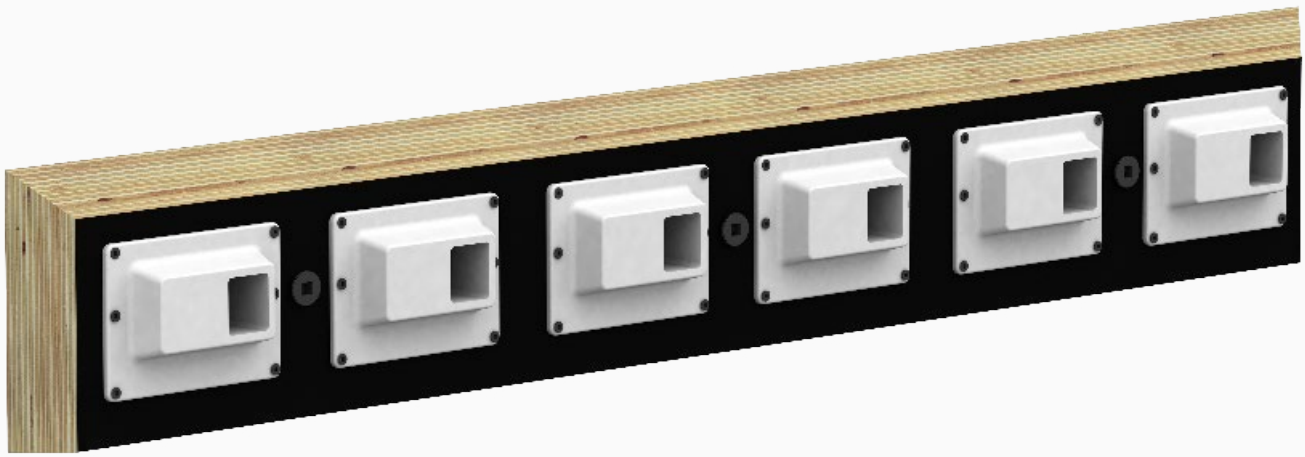
OVERVIEW

Rebate Formers come in a range of sizes providing multiple options for your project. Bar sizes applicable to this system are 16mm, 20mm and 24mm which come in several bar spacing & rebate height options.

Customers may require purpose made units to suit their particular application. For further details, please contact Swiftcore.







16MM REBATE FORMER SPECIFICATIONS

			L	H	D	S	RE	
16MM	**Product Code**	**Suitable Anchors**	**Rebate Length (mm)**	**Rebate Height (mm)**	**Rebate Depth (mm)**	**Anchor Spacing (mm)**	**Rebar Embedment (mm)**	**Number of Anchor Inserts**
	RF16-200x130	ANCHOR 16-L ANCHOR 16-U	1200	130	34	200	200	6
	RF16-200x160		1200	160	34	200	200	6
	RF16-200x180		1200	180	34	200	200	6
	RF16-250x130		1200	130	34	250	200	5
	RF16-250x160		1200	160	34	250	200	5
	RF16-250x180		1200	180	34	250	200	5

20MM REBATE FORMER SPECIFICATIONS

			L	H	D	S	RE	
20MM	**Product Code**	**Suitable Anchors**	**Rebate Length (mm)**	**Rebate Height (mm)**	**Rebate Depth (mm)**	**Anchor Spacing (mm)**	**Rebar Embedment (mm)**	**Number of Anchor Inserts**
	RF20-200x160	ANCHOR 20-L ANCHOR 20-U	1200	160	34	200	245	6
	RF20-200x180		1200	180	34	200	245	6
	RF20-250x160		1200	160	34	250	245	5
	RF20-250x180		1200	180	34	250	245	5

24MM REBATE FORMER SPECIFICATIONS

			L	H	D	S	RE	
24MM	**Product Code**	**Suitable Anchors**	**Rebate Length (mm)**	**Rebate Height (mm)**	**Rebate Depth (mm)**	**Anchor Spacing (mm)**	**Rebar Embedment (mm)**	**Number of Anchor Inserts**
	RF24-200x160	ANCHOR 24-L ANCHOR 24-U	1200	160	34	200	295	6
	RF24-200x180		1200	180	34	200	295	6
	RF24-250x160		1200	160	34	250	295	5
	RF24-250x180		1200	180	34	250	295	5

QUALITY ASSURANCE

QUALITY ASSURANCE

Swiftcore Couplers manufacturing process complies to the IATF 16949:2016 International Standard for Automotive Quality Management System. This is applicable to – the manufacture of metal precision forged parts and machined parts.

Agency	Standard	Certificate
nqa.	IATF 16949: 2016	NQA # T 12507 IATF# 0323539

STANDARDS

Swiftcore Coupler bar assemblies have been tested by a NATA accredited laboratory and deemed compliant with the mechanical property's as required by AS/NZS 4671: 2001. Other applicable standards that passed slip option 2 and tensile testing requirements ISO 15835-1: 2018, ISO 15835-2: 2018, ISO 15835-3: 2018.

Agency	Standard	Certificate
IMTS	AS/NZS 4671 : 2001	T 12507

IDENTIFICATION

Each Swiftcore Coupler has an embedded mark on the top face to identify the size quickly. Refer to the table below for reference.

Bar Size (Metric)	Identification
16	Swiftcore 16
20	Swiftcore 20
24	Swiftcore 24
28	Swiftcore 28
32	Swiftcore 32
36	Swiftcore 36
40	Swiftcore 40

Swiftcore™

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