

Installation Guide

Ancon RT Reinforcing Bar Couplers

Ancon RT Couplers are designed to join two reinforcing bars of the same size. They can be assembled in the same concrete pour or in separate concrete pours with the assistance of nailing plates and small polystyrene block-outs.



The following table shows the correlation between bar sizes and the RT couplers, nailing plates and thread dimensions.

Table 1 - Correlation between bar size, RT couplers, nailing plates and thread dimensions

Bar Size	RT Coupler	Nailing Plate	Thread Size x Thread Pitch	Thread Length	Length of Threaded Bar
12	RTC12	NPRT12 (light blue)	M13 x 1.75	17	125
16	RTC16	NPRT16 (brown)	M17 x 2.5	20	135
20	RTC20	NPRT20 (white)	M21 x 2.5	25	150
25	RTC25	NPRT25 (grey)	M26 x 3.5	27	160
32	RTC32	NPRT32 (black)	M33 x 3.5	37	190
40	RTC40	N/A	M41 x 3.5	45	215



Reinforcing Bar with RT thread









RT Positional Stud (threaded bar)

RT Positional Coupler



Locknut



Installation RT Coupler

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Installation of RT Coupler

The RT system contains one RT Coupler and two reinforcing bars with threads. The bar is typically supplied with the coupler already installed. In this case, begin with step 2.





Screw the coupler to the rear of the thread on the fixed bar and lock tight. The bar end should be central within the coupler.

Remove the plastic cap from the coupler. Position and rotate the continuation bar in the coupler.



Tighten the joint using a wrench on the continuation bar. After tightening there should be no more than 2-4mm of thread exposed, depending on the diameter of the rebar.



To ensure structural integrity of the connection, any actions, such as on-site bending, which induce cold working of the bar in the threaded region are to be strictly avoided.

Installation of RT Coupler system in Two Stage Construction

The RT system contains one RT Coupler and two reinforcing bars with threads. The bars are typically supplied with the coupler already installed.



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Screw the coupler onto the fixed bar and ensure the plastic cap is installed. Place the bar in position with the coupler flush with the formwork and securely tie to the surrounding reinforcement.



Remove the formwork and plastic cap. Position and rotate the continuation bar into the coupler.



Tighten the joint using a wrench on the continuation bar. After tightening there should be no more than 2-4mm of thread exposed, depending on the diameter of the rebar.

Installation of RT Coupler system in Two Stage Construction using nailing plate

The RT system installed with a nailing plate contains one RT Coupler and two reinforcing bars with threads. The bars are typically supplied with the coupler already installed.



Screw the coupler onto the fixed bar, remove the plastic cap and screw-in the nailing plate. Fix the nailing plate flush with the formwork and tie the bar in position to surrounding reinforcement.



Remove the formwork and nailing plate. Position and rotate the continuation bar into the coupler.



Tighten the joint using a wrench on the continuation bar. After tightening there should be no more than 2-4mm of thread exposed, depending on the diameter of the rebar.



To ensure structural integrity of the connection, any actions, such as on-site bending, which induce cold working of the bar in the threaded region are to be strictly avoided.



Installation RT Coupler

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Installation of RT Positional Coupler

The Ancon RT Positional Coupler consists of two RT couplers, two reinforcement bars with threads, a threaded bar section and a lock nut. The first bar is typically supplied with the coupler already installed. In this case, begin with step 2.







Run the coupler to the end of the thread on the fixed bar.



Rotate the threaded assembly until the exposed thread fully engages within the coupler. Using a wrench on the coupler, rotate to lock the connection tight. The positional stud is designed to allow a movement gap of approximately 5mm.



Use a second wrench to slacken the coupler/ locknut interface.



Offer the threaded end of the continuation bar to abut the threaded stud.



Rotate the coupler from the threaded stud to fully engage on the thread on the continuation bar. Lock tight using a wrench.



Rotate the lock nut and tighten against the continuation bar coupler. Lock tight using a wrench.



To ensure structural integrity of the connection, any actions, such as on-site bending, which induce cold working of the bar in the threaded region are to be strictly avoided.

Leviat 2/19 Nuttall Drive, Hillsborough, Christchurch 8022 +64 (0) 3 376 5205 info.ancon.nz@leviat.com