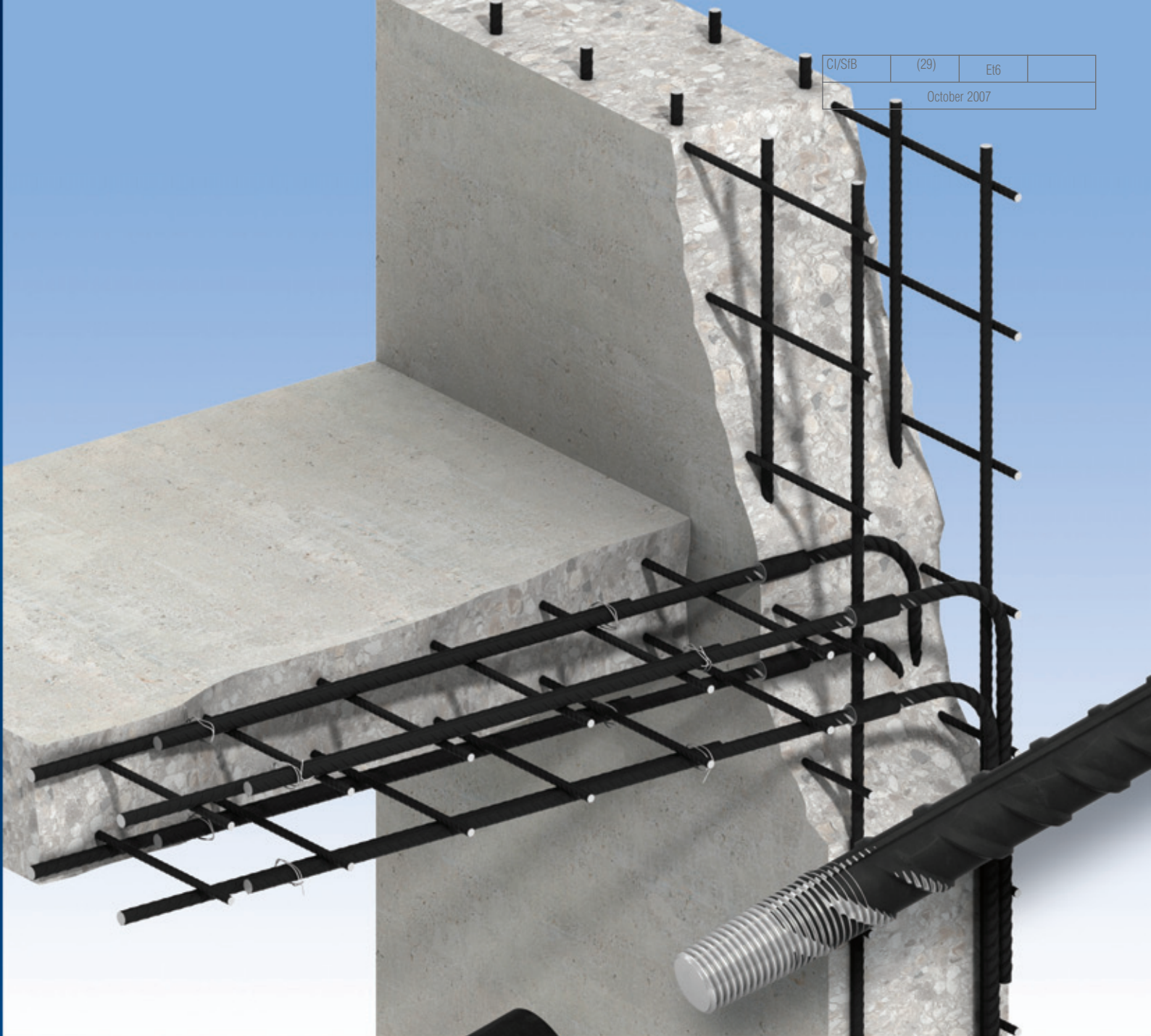
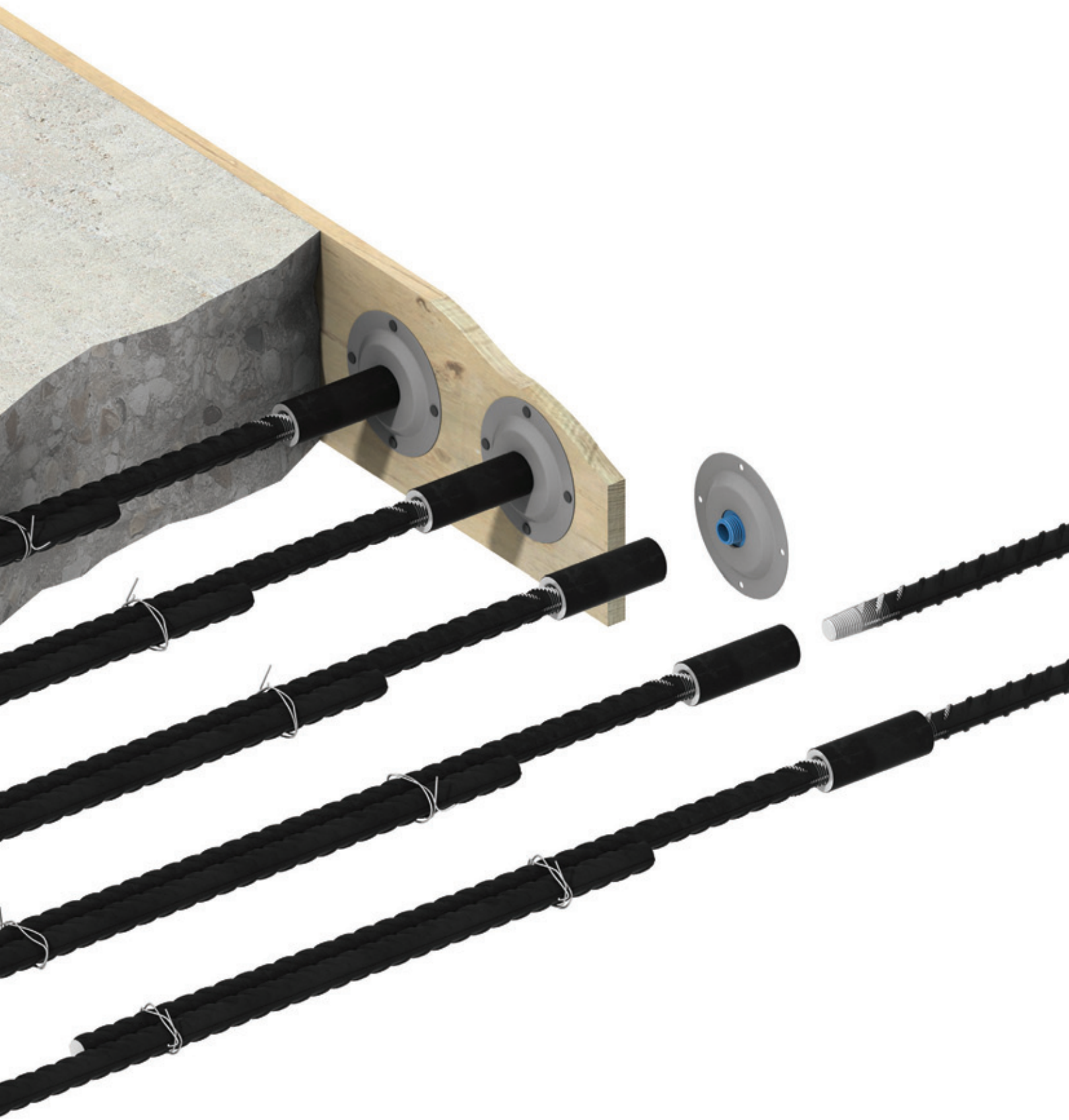


CI/SIB	(29)	E16	
October 2007			



Starter Bar System for the Construction Industry

Ancon[®]
BUILDING PRODUCTS



Ancon designs and manufactures high integrity steel products for the construction industry. Through continuous programmes of new product development, inward investment and employee advancement, the company is committed to maintaining the highest level of customer service within a dynamic and challenging industry.

The Ancon Starter Bar system is designed to increase the speed of construction at joints where continuity of reinforcement is required, or for fixing applications using standard metric bolts or studding. Use of this Ancon system can simplify concrete design and eliminate the need to drill formwork or concrete.



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Wall Ties and Restraint Fixings	Enquiry/Order Form	6
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- Channel and Bolt Fixings
- Tension Systems
- Shear Load Connectors
- Reinforcing Bar Couplers

**Reinforcement
Continuity Systems**

- Punching Shear Reinforcement
- Insulated Balcony Connectors
- Flooring and Formed Sections
- Special Fabrications
- Refractory Fixings



ISO 9001: 2000
FM 12226



ISO 14001: 2004
EMS 505377

Starter Bar System

The Ancon Starter Bar system is designed to increase the speed of construction at joints where continuity of reinforcement is required, or for fixing applications using standard metric bolts or studding. The system incorporates either a tapered thread coupler, approved by UK CARES, or a parallel thread adaptor.

Use of this system can simplify concrete design and eliminate the need to drill formwork or concrete.

All bars are grade 500 and are cropped and bent to BS 8666: 2005.

CARES

Ancon tapered thread couplers are approved by UK CARES for compliance with the requirements of BS 8110. The Starter Bar System is manufactured using CARES approved reinforcing bar.



Eazistrip Continuity System

Ancon also manufactures the Eazistrip system; an alternative means of providing reinforcement continuity at construction joints. This system features pre-bent bars that are housed within a casing and cast into concrete. After striking the formwork, the casing's cover is removed and the bars straightened, ready for joining to the main reinforcement of the adjoining pour.

Technical/Sales Support

Ancon provides a dedicated service to the concrete sector. The 'Products for Structural Concrete' team provides technical advice, pricing information, order fulfilment and after sales support. Ancon's product offering includes, but is not restricted to, reinforcing bar couplers, reinforcement continuity systems, punching shear reinforcement, shear load connectors and balcony connectors. Enquiries from overseas are also serviced by this team. Email concrete@ancon.co.uk, fax +44 (0) 114 238 1240 or call +44 (0) 114 275 5224 with your enquiry.

SYSTEM COMPONENTS

Starter Bar

The Starter Bar is the female component of the system. It consists of a bar, normally threaded at one end only, supplied fixed to an Ancon coupler. Standard configurations, stock sizes and manufacturing limitations are shown on the adjacent page.

Two types of coupler are available:

Ancon Tapered Thread Coupler -

to accept a tapered thread continuation bar



Ancon Parallel Thread Adaptor -

to accept a standard metric bolt or studding



Each coupler features a plastic end cap to help prevent the ingress of concrete during casting.

Ancon couplers exceed the tensile strength for reinforcing bars to BS 4449:1997. They are designed to meet the requirements of BS 8110 and achieve failure loads in excess of 115% of the characteristic strength of grade 500 rebar.

Nailing Plate

A nail plate can be fixed to the end of an Ancon Tapered Thread coupler and is held in place by the plastic end cap supplied. This plate simplifies connection of the Starter Bar to the formwork.



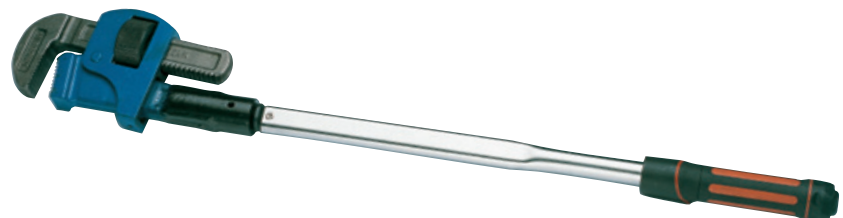
Continuation Bar

The continuation bar, or male section, comprises a straight bar threaded at one end to allow connection to an Ancon tapered thread coupler. Bar lengths to BS 8110 of 50 x bar diameter are held in stock for each bar size. Other lengths are available to order. Bars are grade 500.



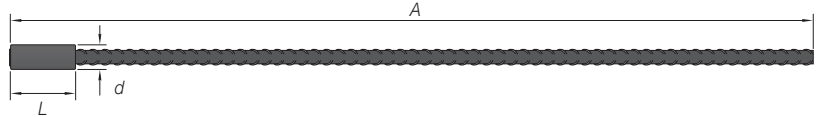
Torque Wrench

In order to ensure correct assembly, continuation bars should be tightened using a calibrated torque wrench. Torque wrenches purchased from Ancon are supplied with a certificate of calibration.



TECHNICAL DETAILS

Starter Bar with Tapered Thread Coupler Straight Bar - Shape Code 00

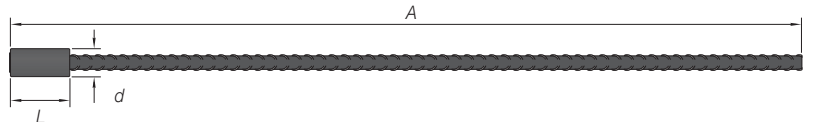


Bar Dia. (mm)	Stocked Length A (mm)	Max. Bar Length (mm)	Coupler Length L (mm)	Coupler External Dia. d (mm)	Torque (Nm)	Nailing Plate Dia. (mm)
12	660	6000	58	22	60	70
16	870	6000	70	25	110	70
20	1075	6000	74	30	165	70
25	1340	6000	90	36	265	90
32	1740	3000	112	46	285	90

Details for specifying and ordering:

TTSB/Bar Dia./F/Dim. A e.g. TTSB/16/F/1200

Starter Bar with Parallel Thread Adaptor Straight Bar - Shape Code 00

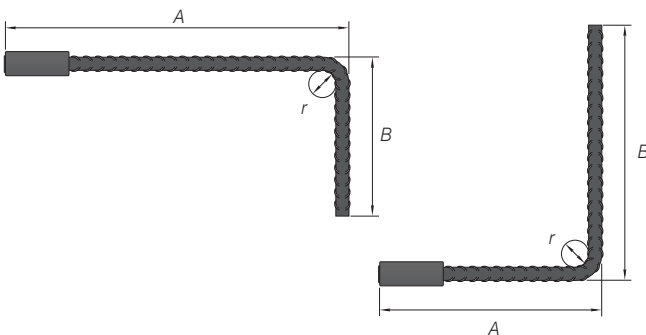


Bar Dia. (mm)	Thread dia. (mm)	Stocked Length A (mm)	Max. Bar Length (mm)	Adaptor Length L (mm)	Adaptor External Dia. d (mm)	Nominal Thread Depth (mm)
12	M16 x 2.0mm pitch	655	6000	53	25	24
16	M20 x 2.5mm pitch	870	6000	68	28	30
20	M24 x 3.0mm pitch	1080	6000	78	32	36
25	M30 x 3.5mm pitch	1345	6000	95	40	45
32	M36 x 4.0mm pitch	1715	3000	113	50	54

Details for specifying and ordering:

PTSB/Bar Dia./F/Dim. A e.g. PTSB/16/F/1200

L-Shaped Bar - Shape Code 11



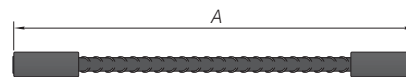
Bar Dia. (mm)	Min. Length A/B	Min. Bend Dia. r
12	165mm / 145mm	24mm
16	180mm / 155mm	32mm
20	255mm / 180mm	70mm
25	280mm / 190mm	87mm
32	330mm / 210mm	112mm

Details for specifying and ordering:

Tapered Thread TTSB/Bar Dia./F/Dims. A/B e.g. TTSB/16/F/400/600

Parallel Thread Adaptor PTSB/Bar Dia./F/Dims. A/B e.g. PTSB/16/F/400/600

Dumbbell-Shaped Bar - Shape Code 00



Bar Dia. (mm)	Parallel Thread Adaptor x 2		Tapered Thread Coupler x 2
	Threaded Stud*	Min. Length A	Min. Length A
12	M16 x 52mm	110mm	340mm
16	M20 x 70mm	140mm	360mm
20	M24 x 86mm	160mm	364mm
25	M30 x 125mm	195mm	380mm
32	M36 x 112mm	230mm	402mm

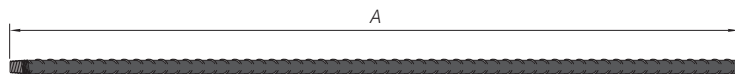
Both options are designed to accept a tapered thread continuation bar
*Grade 8.8 High Yield Steel

Details for specifying and ordering:

Tapered Thread TTSD/Bar Dia./F/Dim. A e.g. TTSD/16/F/600

Parallel Thread Adaptor PTSD/Bar Dia./F/Dim. A e.g. PTSD/16/F/600

Continuation Bar - Tapered Thread



Bar Dia. (mm)	Stocked Length A (mm)	Max. Bar Length (mm)	Torque (Nm)
12	625	6000	60
16	830	6000	110
20	1035	6000	165
25	1290	6000	265
32	1655	3000	285

Details for specifying and ordering:

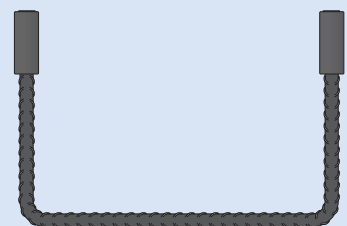
TTSB/Bar Dia./M/Dim. A e.g. TTSB/16/M/1000

Torque Wrench

Torque (Nm)	Part No.
60-285	E879008


Other Configurations

In addition to the standard range shown, Ancon can manufacture other configurations of Starter Bar on request. These can be specified on the order form on the following page.






ENQUIRY/ORDER FORM

Please photocopy this page and use it to detail your enquiry/order. Ancon can be contacted by fax on +44 (0) 114 238 1240 or by email on concrete@ancon.co.uk

Member	Bar Mark	Type & Size	No. of Members	No. in each	Total No.	Length of Each Bar	Shape Code	Dims. A ¹ Dimension according to sketch using the key ²	B	C	D	E	Ancon Coupler Type ³	Nailing Plate? Y/N
e.g. Column 18	7	H25	1	5	5	890	11	A = 240 B = 750 					TTS	Y
Torque Wrench: Quantity														

Notes

- ¹ Dimension A should be taken from the outer end of the coupler/concrete face
- ² Key
 Bar  Thread on bar  Coupler on bar 
- ³ TTS = Tapered Thread Coupler, PT = Parallel Thread Adaptor

Date _____ Order Enquiry _____ Delivery Date _____

Company _____ Delivery Address _____

Address _____

Town _____ Post Code _____

Contact _____

Tel _____ Fax _____

Tel _____ Fax _____ Project _____

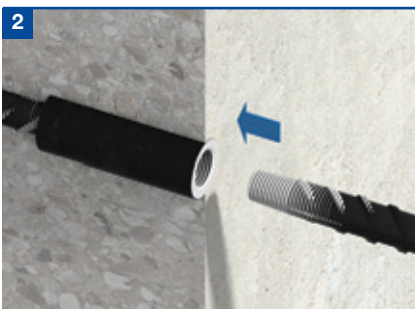
Email _____ Email _____

STARTER BAR INSTALLATION

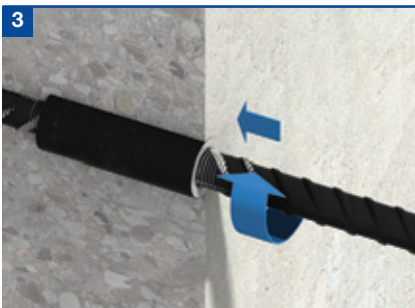
Installation is as follows when using the Tapered Thread starter bar system.



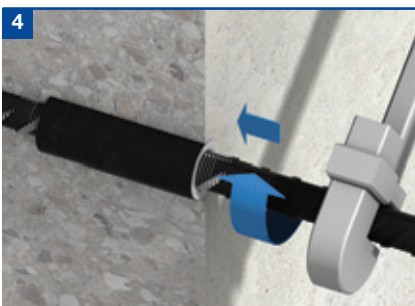
The coupler is supplied fixed to the reinforcing bar, ready to be installed and cast in concrete.



After casting the concrete and when ready to extend, remove the plastic end cap (and nailing plate where appropriate) from the coupler. Position the continuation bar in the sleeve and rotate the bar into the coupler.



Continue to screw the bar into the coupler until tight.



To ensure correct installation, tighten the joint to the specified torque using a calibrated torque wrench on the continuation bar. Tightening torques are shown in the table on page 5.

OTHER ANCON PRODUCTS

Reinforcing Bar Couplers

The use of reinforcing bar couplers can provide significant advantages over lapped joints. Design and construction of the concrete can be simplified and the amount of reinforcement required can be reduced. The Ancon range includes parallel threaded, tapered threaded and mechanically bolted couplers.



Insulated Balcony Connections

Ancon Isolan connectors join external concrete balconies to internal floor slabs. Used to minimise cold bridging, they provide continuity to the thermal insulation. Standard systems, comprising rigid CFC-free polystyrene insulation and duplex stainless steel shear reinforcement, suit most depths of cantilever and simply supported balconies. Conventional reinforcing bars are used to provide the tension and compression reinforcement.



Punching Shear Reinforcement

Used within a slab to provide additional reinforcement around columns, Ancon Shearfix is the ideal solution to the design and construction problems associated with punching shear. The system consists of double-headed studs welded to flat rails, positioned in a symmetrical pattern around the column head. The shear load from the slab is transferred through the studs into the column.



Shear Load Connectors

Ancon DSD and ESD Shear Load Connectors are used to transfer shear across expansion and contraction joints in concrete. They are more effective at transferring load and allowing movement to take place than standard dowels, and can be used to eliminate double columns at structural movement joints in buildings.



Channel and Bolt Fixings

Ancon offers a wide range of channels and bolts in order to fix stainless steel masonry support, restraints and windposts to structural frames. Cast-in channels and expansion bolts are used for fixing to the edges of concrete floors and beams.



Special Fabrications

Ancon has a wealth of experience of working with stainless steel and can produce special fabrications to suit individual customer requirements. Ancon supplies industries such as civil and marine engineering, water, petrochemical, mining and food handling and maintains large stocks of stainless steel in order to meet urgent delivery requirements.



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These products are available from:

The construction applications and details provided in this literature are indicative only. In every case, project working details should be entrusted to appropriately qualified and experienced persons.

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