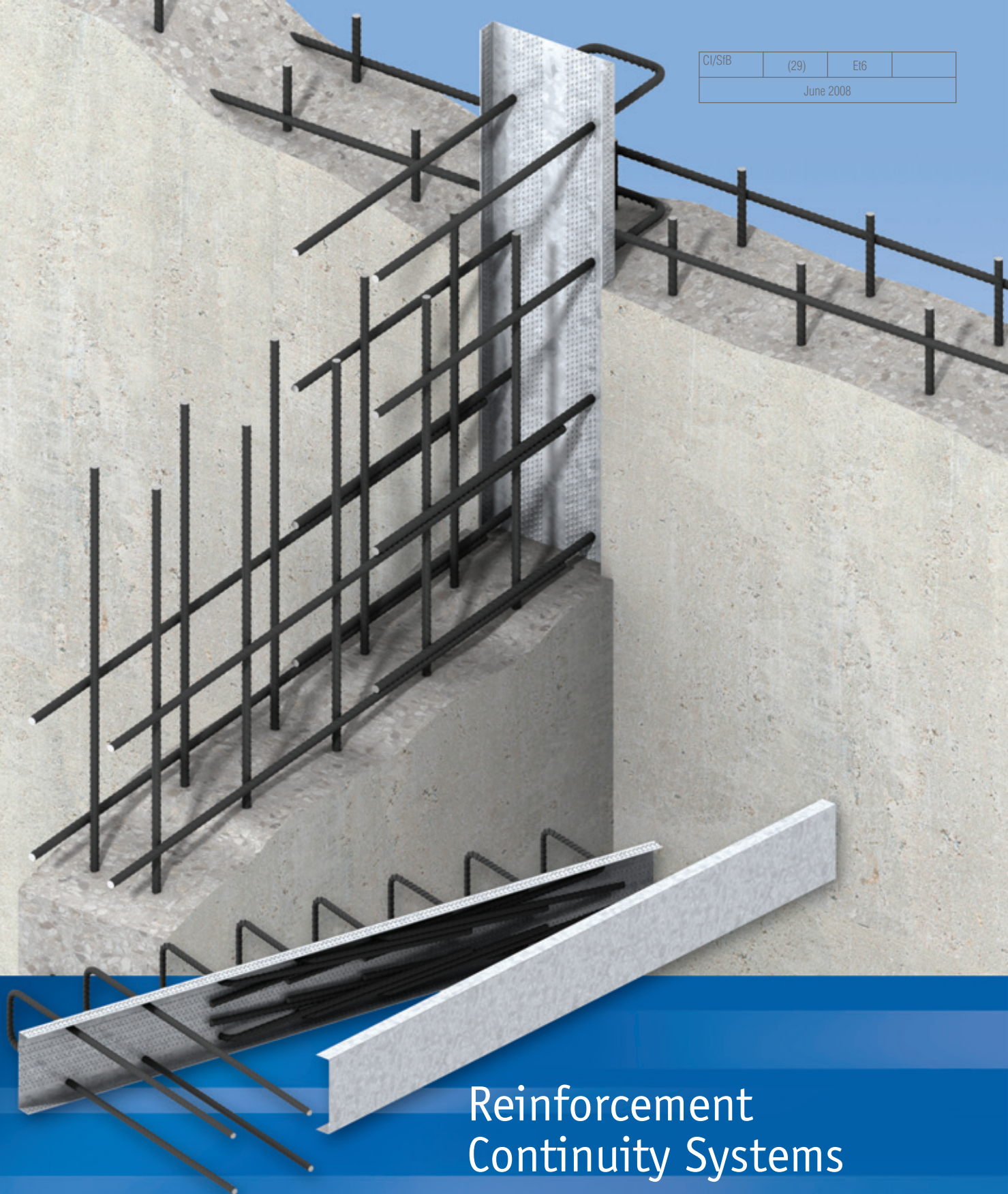


CI/SIB	(29)	E16	
June 2008			



Reinforcement Continuity Systems

for the Construction Industry



**TECHNICAL
APPROVAL**



5017

Ancon[®]
BUILDING PRODUCTS



This brochure is printed on paper produced from 80% recycled post-consumer fibre and 20% virgin pulp which is sourced from responsibly managed and sustainable forests (FSC certified). The printing inks and sealant are vegetable-based making the document fully recyclable.



When you have finished with this literature please recycle it

80% recycled

This literature is printed on 80% recycled paper

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 use of reinforcement continuity systems is a widely accepted means of providing continuity of reinforcement across construction joints in concrete.

Masonry Support Systems	Eazistrip Reinforcement Continuity Systems	4
Masonry Reinforcement	Standard Range Configurations	5
Windposts and Lintels	Standard Range Specifications	6-7
Wall Ties and Restraint Fixings	Installation	8
Channel and Bolt Fixings	On-site Cutting	9
Tension Systems	Enquiry/Order Form	10
Stainless Steel Fabrications	Eazistrip Water Stop	11
Flooring and Formed Sections	Other Ancon Products	11
Shear Load Connectors		
Reinforcing Bar Couplers		

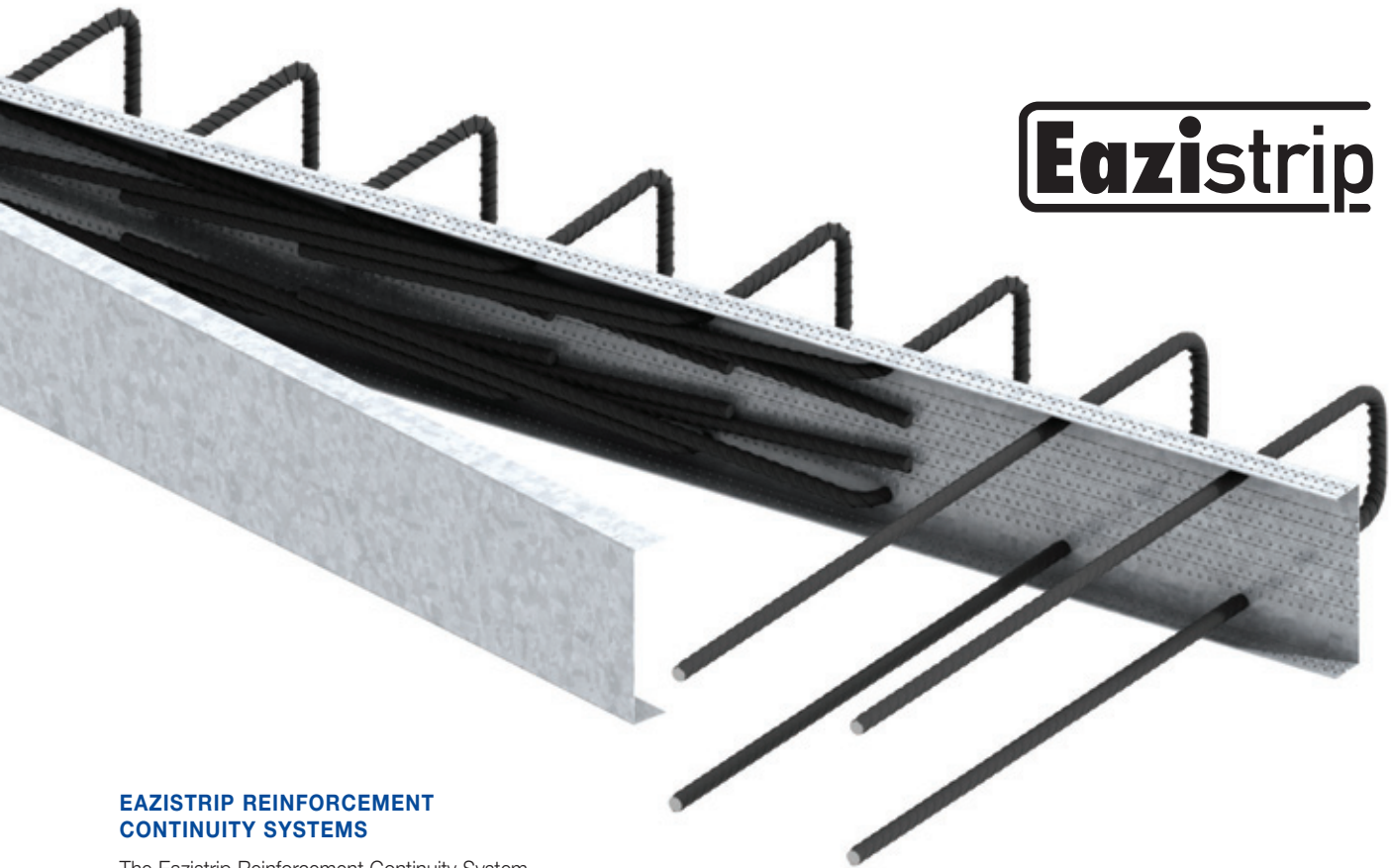
Reinforcement Continuity Systems

Punching Shear Reinforcement
Insulated Balcony Connectors
Refractory Fixings



Eazistrip Reinforcement Continuity Systems

Eazistrip



EAZISTRIP REINFORCEMENT CONTINUITY SYSTEMS

The Eazistrip Reinforcement Continuity System is a quick and easy to install method of maintaining continuity of reinforcement at construction joints in concrete. It consists of a galvanised steel casing with a dimpled surface to provide an effective concrete bond. Pre-bent bars are housed within the casing and are enclosed by a protective cover. Each end of the unit is sealed with a polystyrene block in order to prevent the ingress of concrete.

The complete unit is nailed to the formwork. Alternatively it can be wired back to the main reinforcement cage. The concrete is then cast. After striking the formwork, the cover is removed and the bars are straightened, ready for lapping onto the main reinforcement, using an Eazistrip re-bending tool.

The steel casing remains embedded in the wall and is filled with concrete when the next section is poured, the dimpled surface providing an efficient key.

Use of the Eazistrip system offers many benefits over conventional joint construction, including the simplification of formwork design and removal of the need to drill shuttering. This contributes to the acceleration of the construction process. As the bars remain enclosed within the casing until required, they are protected and the risk of injury from projecting bars is minimised. Easy to use, the system requires little on site training in order to carry out installation.

The Eazistrip system is potentially suitable for use in any construction joint in concrete, but the most commonly found applications include:

- Floor slabs
- Walls
- Stairwells
- Corbels
- Diaphragm walls
- Jumpforms
- Brick support ledges

QUALITY

Eazistrip Reinforcement Continuity Systems are manufactured using CARES approved bar. The type of reinforcement is selected by Ancon Building Products to provide a suitable degree of ductility, ensuring that it complies with the tensile requirements of BS4449: 2005 Grade B500B after prefabrication and re-bending on site. The bars are bent in accordance with BS8666: 2005.

It is the designer's responsibility to ensure reinforcement is adequately designed in accordance with the code and detailed to ensure anchorages and bearing stresses are appropriate.

Ancon Building Products is a BS EN ISO9001 registered company.

CARES APPROVAL

Ancon Eazistrip is approved by UK CARES.



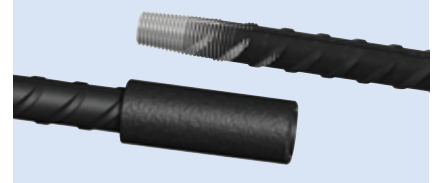
**TECHNICAL
APPROVAL**



5017

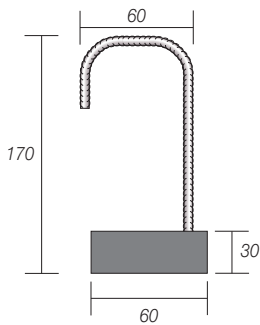
ANCON STARTER BAR SYSTEM

Ancon also manufactures a Starter Bar system as an alternative means of providing reinforcement continuity at construction joints. Bars (12-32mm dia.) are supplied fixed to an Ancon tapered thread coupler. The couplers and the bars used in this system are approved by UK CARES. Once cast in concrete, the coupler's end cap is removed and a threaded continuation bar is installed with a calibrated torque wrench to complete the connection.

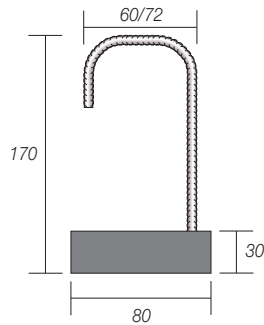


STANDARD RANGE CONFIGURATIONS

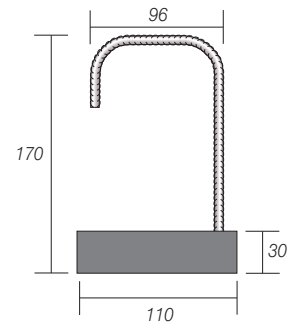
Type 60



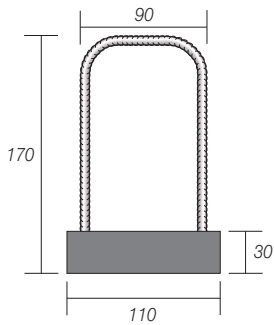
Type 80



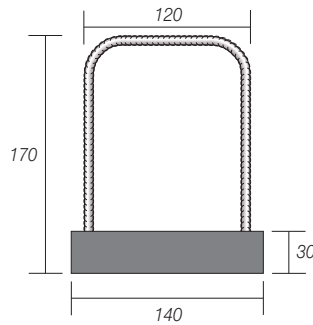
Type 110



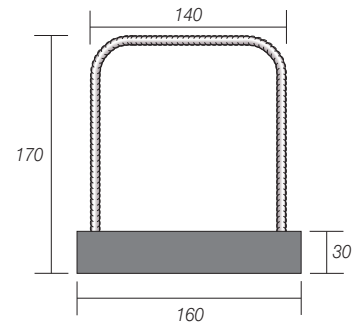
Type 110



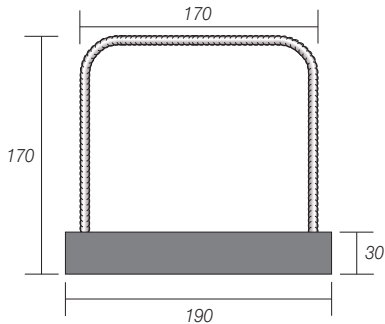
Type 140



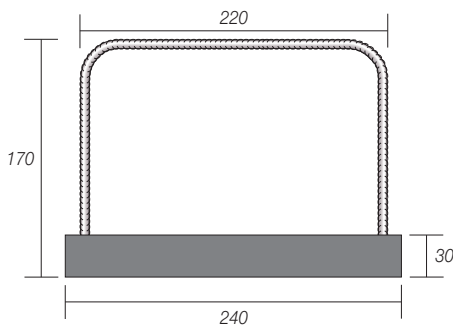
Type 160



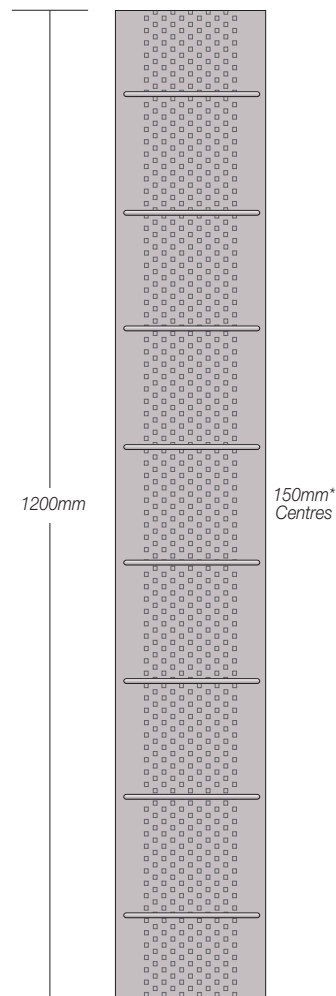
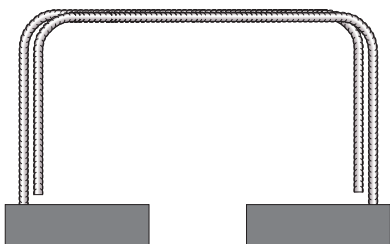
Type 190



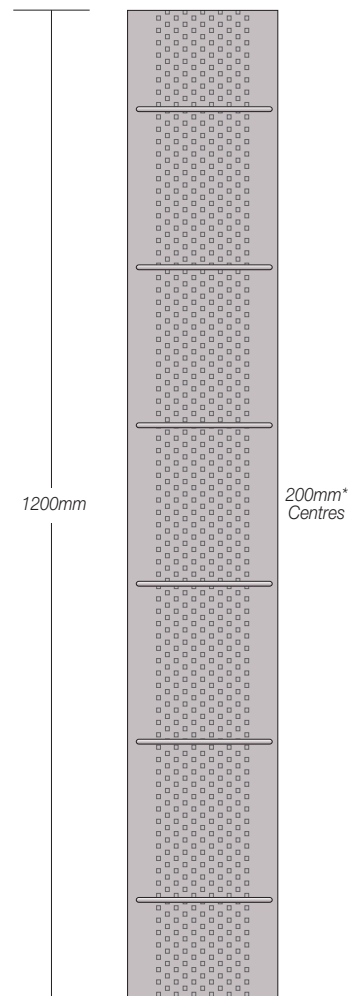
Type 240



When the stirrup width exceeds 220mm, units will be supplied as two single overlapping hooks, to be positioned side by side.



*Other centres are available



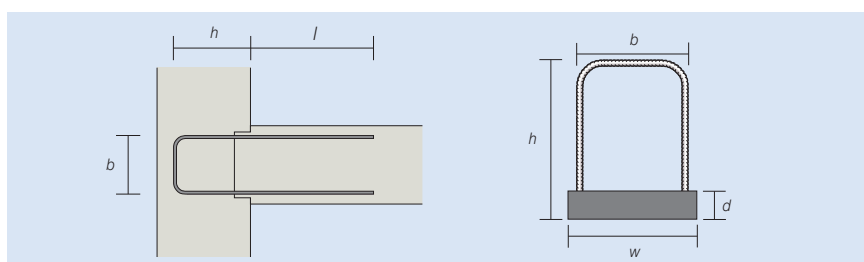
Notes: Units containing 16mm bars are nominally 50mm deep. On 16mm Ø Type U boxes, the stirrup may be achieved using two shape code 21 bars. These are referenced DH.

Eazistrip Reinforcement Continuity Systems

STANDARD RANGE SPECIFICATIONS

The following tables give details of the Eazistrip standard ranges. Many customers require purpose made units to suit their particular application. In order to meet this requirement Ancon will manufacture according to your specific bar arrangement. The most common shapes are shown on page 10. For further details please contact Ancon Building Products.

U TYPE BOX DIMENSIONS



UK Range Dimensions

Part No.	Box Width mm	Box Length mm	Rebar Dia mm	Centres mm	Stirrup Height (h) mm	Stirrup Width (b) mm	Leg Length (l) mm	Bars / Box
EZ 60H 10/150	60	1200	10	150	170	60	410	8
EZ 60H 10/200	60	1200	10	200	170	60	410	6
EZ 80H 10/150	80	1200	10	150	170	60	410	8
EZ 80H 10/200	80	1200	10	200	170	60	410	6
EZ 80H 12/150	80	1200	12	150	170	80	500	8
EZ 80H 12/200	80	1200	12	200	170	80	500	6
EZ 110U 10/150	110	1200	10	150	170	90	410	8
EZ 110U 10/200	110	1200	10	200	170	90	410	6
EZ 110U 12/200	110	1200	12	200	170	90	500	6
EZ 140U 10/150	140	1200	10	150	170	120	410	8
EZ 140U 10/200	140	1200	10	200	170	120	410	6
EZ 140U 12/150	140	1200	12	150	170	120	500	8
EZ 140U 12/200	140	1200	12	200	170	120	500	6
EZ 160U 10/150	160	1200	10	150	170	140	410	8
EZ 160U 10/200	160	1200	10	200	170	140	410	6
EZ 160U 12/150	160	1200	12	150	170	140	500	8
EZ 160U 12/200	160	1200	12	200	170	140	500	6
EZ 190U 10/150	190	1200	10	150	170	170	410	8
EZ 190U 10/200	190	1200	10	200	170	170	410	6
EZ 190U 12/150	190	1200	12	150	170	170	500	8
EZ 190U 12/200	190	1200	12	200	170	170	500	6
EZ 190DH 16/150	190	1200	16	150	170	170	650	8
EZ 190U 16/200	190	1200	16	200	170	170	650	6
EZ 240U 10/150	240	1200	10	150	170	220	410	8
EZ 240U 10/200	240	1200	10	200	170	220	410	6
EZ 240U 12/150	240	1200	12	150	170	220	500	8
EZ 240U 12/200	240	1200	12	200	170	220	500	6
EZ 240U 16/150	240	1200	16	150	170	220	650	8
EZ 240U 16/200	240	1200	16	200	170	220	650	6

Notes: Those sizes shown in **bold** are normally available from stock. Dimensions shown in the above table are nominal. Heights and lengths may typically vary by one bar diameter. Maximum box length is 3m dependant upon weight. Boxes with a DH reference contain double hook bars rather than a single U bar.



Continental Range Dimensions

Part No.	Box Width mm	Box Length mm	Rebar Dia mm	Centres mm	Stirrup Height (h) mm	Stirrup Width (b) mm	Leg Length (l) mm	Bars / Box
EZ 60H 10/150	60	1200	10	150	155	60	340	8
EZ 60H 10/200	60	1200	10	200	155	60	340	6
EZ 80H 10/150	80	1200	10	150	155	60	340	8
EZ 80H 10/200	80	1200	10	200	155	60	340	6
EZ 80H 12/150	80	1200	12	150	155	80	405	8
EZ 80H 12/200	80	1200	12	200	155	80	405	6
EZ 110H 16/150	110	1200	16	150	155	96	575	8
EZ 110H 16/200	110	1200	16	200	155	96	575	6
EZ 110U 10/150	110	1200	10	150	155	90	340	8
EZ 110U 10/200	110	1200	10	200	155	90	340	6
EZ 110U 12/150	110	1200	12	150	155	90	340	8
EZ 110U 12/200	110	1200	12	200	155	90	405	6
EZ 140U 10/150	140	1200	10	150	155	120	340	8
EZ 140U 10/200	140	1200	10	200	155	120	340	6
EZ 140U 12/150	140	1200	12	150	155	120	405	8
EZ 140U 12/200	140	1200	12	200	155	120	405	6
EZ 160U 10/150	160	1200	10	150	155	140	340	8
EZ 160U 10/200	160	1200	10	200	155	140	340	6
EZ 160U 12/150	160	1200	12	150	155	140	405	8
EZ 160U 12/200	160	1200	12	200	155	140	405	6
EZ 160DH 16/150	160	1200	16	150	160	140	410	8
EZ 160DH 16/200	160	1200	16	200	160	140	410	6
EZ 190U 10/150	190	1200	10	150	155	170	340	8
EZ 190U 10/200	190	1200	10	200	155	170	340	6
EZ 190U 12/150	190	1200	12	150	155	170	405	8
EZ 190U 12/200	190	1200	12	200	155	170	405	6
EZ 190DH 16/150	190	1200	16	150	160	170	575	8
EZ 190U 16/200	190	1200	16	200	160	170	650	6
EZ 240U 10/150	240	1200	10	150	155	220	340	8
EZ 240U 10/200	240	1200	10	200	155	220	340	6
EZ 240U 12/150	240	1200	12	150	155	220	500	8
EZ 240U 12/200	240	1200	12	200	155	220	500	6
EZ 240U 16/150	240	1200	16	150	160	220	650	8
EZ 240U 16/200	240	1200	16	200	160	220	650	6

Notes: Dimensions shown in the above table are nominal. Heights and lengths may typically vary by one bar diameter. Maximum box length is 3m dependant upon weight. Boxes with a DH reference contain double hook bars rather than a single U bar.

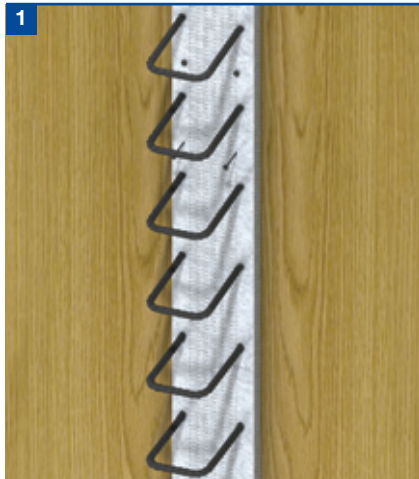
RADIUSED EAZISTRIP

Many of the units detailed in the brochure are available radiused. Please contact Ancon with your requirements.



Eazistrip Reinforcement Continuity Systems

INSTALLATION



Nail the Eazistrip through the casing to the formwork or alternatively securely tie the projecting anchorage reinforcing bars back to the main reinforcement. In both cases the Eazistrip box should be securely fixed to avoid displacement during concreting. The casing should be tight against the formwork. Pour concrete.



Strike the formwork to reveal the steel cover.



Remove the steel cover to expose the pre-bent bars.



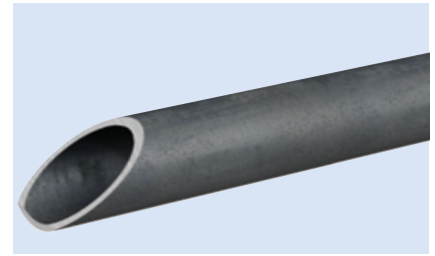
Straighten the bars using the appropriate sized Ancon Eazistrip re-bending tool for the size of bar. The bars should be straightened only once. To avoid damage to adjacent concrete, it is prudent to allow a concrete curing period of seven days. See 'Bar Straightening' for more information.



Once the bars are straightened and aligned they are ready for lapping with the concrete element reinforcement, provided by others.

BAR STRAIGHTENING

The bars in the Eazistrip box must be straightened using the appropriate sized Ancon Eazistrip re-bending tool. This is a steel tube designed to fit over the bar, the internal diameter being slightly larger than the maximum dimension over the ribs of the bar. One end of the tube has a section cut away; this provides support to the outside of the bend during straightening of the bar and limits the point contact of the tube on the bar.



Use of the tool allows the re-bending process to be carried out in a smooth continuous action (avoiding jerky action), the tube being moved along the bar and around the bend as it is straightened. Scaffold tubes or similar must not be used to straighten bar.

To enable the re-bending tool to be fitted onto the bar, the bar should be pulled the minimum distance from the Eazistrip steel casing to enable this. The re-bending tool should then be slid along the bar to the start of the bend radius.

The bar straightening process should be smooth and progressive with the tube allowed to move along the bend towards the metal casing as it is straightened. The tool should contact the Eazistrip steel casing at the completion of the straightening process.

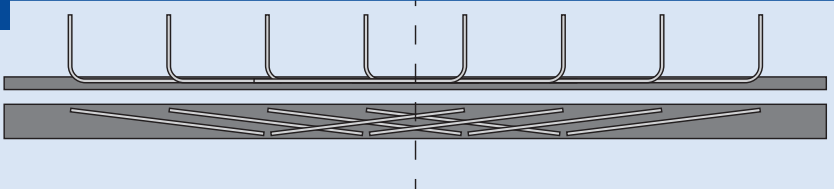
The tube is then removed and the straightened bar checked for alignment and cover with the adjoining reinforcement.

The Eazistrip reinforcing bars should not be straightened when the temperature of the steel is below 5°C. Where straightening is necessary below 5°C, indirect warming of the steel to a temperature not exceeding 100°C is permitted.

The use of scaffold tubes, or other inappropriate tools will result in excessive kinks in the region of the bar bend and result in undesirable work hardening which may damage the bar and affect the strength of the bar. Re-bending must be undertaken using only the Ancon Eazistrip re-bending tool. Bending the bar in excess of the recommendations will also result in work hardening of the rebar and should therefore be avoided.

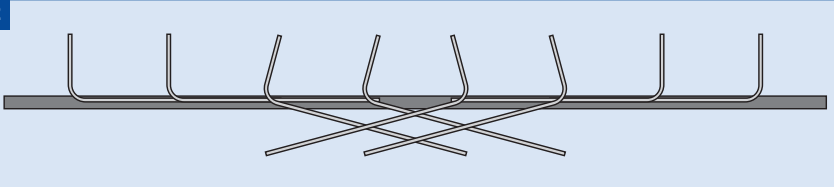
ON-SITE CUTTING

1



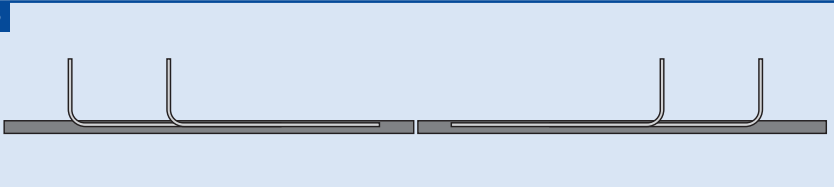
Identify the location of the intended cut.

2



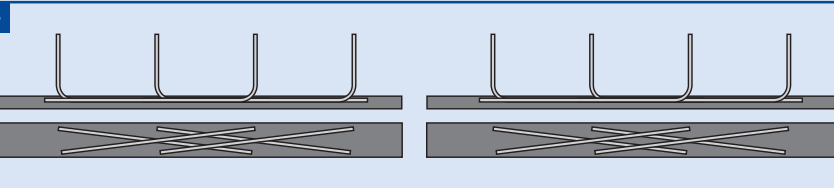
Slide the protective cover from the box and remove the bars which pass over the cut location.

3



Cut through the steel casing using a disc cutter.

4



Replace the bars to face the opposite direction to their original position. Cut the cover to the same lengths as the steel casing and replace to protect the bars. The ends of the boxes must be sealed, using polystyrene blocks, to prevent the ingress of concrete.

Note: Protective gloves should be worn when removing covers, straightening bars, cutting boxes and during general handling of Eazistrip.



[illegible]

EAZISTRIP WATER STOP

Where the potential for water ingress through the construction joint is a major concern, Eazistrip can be supplied with a Pentaflex hydrostatic seal. The seal is factory fitted inside and outside the box to provide double-sided protection against water or moisture permeation along the joint face.

As Pentaflex is a hydrostatic seal, it is not reliant on expansion, unlike hydrophilic type seals, and it provides a continuous elastic seal by means of the bond between the Pentaflex and the fresh concrete. Resistant to organic waste water, Pentaflex has been tested by the Hygiene-Institut, Geisenkirchen, Germany for use with potable water.

A protective film on the Pentaflex prevents contamination by dust or dirt during storage, handling and installation. The film must be removed prior to concreting. When installing and abutting boxes, joints are achieved by pressing together a 50mm overlap of the Pentaflex material, to ensure continuous protection against water permeation.



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 range includes threaded and mechanically bolted couplers.



Shear Load Connectors

Ancon DSD 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 plain 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.



Insulated Balcony Connections

Ancon Isolant connectors join external concrete balconies to internal concrete 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 cantilevered 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.



Special Stainless Steel Fabrications

Ancon has a wealth of experience in working with different types and grades of stainless steel. Advanced manufacturing facilities enable one-off or volume orders to be fabricated to individual project requirements and to exacting quality standards. Considerable material stocks are maintained in order to meet urgent delivery deadlines.



Ancon Building Products

President Way, President Park
Sheffield S4 7UR
United Kingdom
Tel: +44 (0) 114 275 5224
Fax: +44 (0) 114 276 8543
Email: info@ancon.co.uk
Visit: www.ancon.co.uk

Ancon (Middle East) FZE

PO Box 17225
Jebel Ali
Dubai
United Arab Emirates
Tel: +971 (0) 4 883 4346
Fax: +971 (0) 4 883 4347
Email: anconcccl@emirates.net.ae
Visit: www.ancon.ae

Ancon Building Products

114 Kurrajong Avenue
Mount Druitt
Sydney
NSW 2770
Australia
Tel: +61 (0) 2 8808 1111
Fax: +61 (0) 2 9675 3390
Email: pac.ancon@anconbp.com.au
Visit: www.anconbp.com.au

Ancon (Schweiz) AG

Gewerbezone Widalmi 10
3216 Ried bei Kerzers
Switzerland
Tel: +41 (0) 31 750 3030
Fax: +41 (0) 31 750 3033
Email: info@ancon.ch
Visit: www.ancon.ch

Ancon Building Products GesmbH

Gerspergasse 9/3 Top 1
A-1210 Vienna
Austria
Tel: +43 (0) 1 259 58 62-0
Fax: +43 (0) 1 259 58 62-40
Email: info@ancon.at
Visit: www.ancon.at

Ancon GmbH

Bartholomäusstrasse 26
90489 Nuremberg
Germany
Tel: +49 (0) 911 955 1234 0
Fax: +49 (0) 911 955 1234 9
Email: info@anconbp.de
Visit: www.anconbp.de

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.

Whilst every care has been exercised in the preparation of this document to ensure that any advice, recommendations or information is accurate, no liability or responsibility of any kind is accepted in respect of Ancon Building Products.

With a policy of continuous product development Ancon Building Products reserves the right to modify product design and specification without due notice.

© Ancon Building Products 2008

This brochure is printed on paper produced from 80% recycled post-consumer fibre and 20% virgin pulp which is sourced from responsibly managed and sustainable forests (FSC certified). The printing inks and sealant are vegetable-based making the document fully recyclable.



80% recycled
This literature is printed on 80% recycled paper



ISO 9001: 2000
FM 12226



ISO 14001: 2004
EMS 505377