We are one team. We are Leviat.

Leviat is the new name of CRH’s construction accessories companies worldwide.

Under the Leviat brand, we have united the expertise, skills and resources of Ancon and its sister companies to create a world leader in fixing, connecting and anchoring technology.

The products you know and trust will remain an integral part of Leviat’s comprehensive brand and product portfolio. As Leviat, we can offer you an extended range of specialist products and services, greater technical expertise, a larger and more agile supply chain and better, faster innovation.

By bring together CRH’s construction accessories family as one global organisation, we are better equipped to meet the needs of our customers, and the demands of construction projects, of any scale, anywhere in the world.

This is an exciting change. Join us on our journey.

Read more about Leviat at Leviat.com
Our product brands include:

- Ancon
- HALFEN
- HELIFIX
- ISEDIO
- PLAKA


- 60 locations
- sales in 30+ locations
- 3000 people worldwide
Starter Bar System
Simplify the design and construction of concrete

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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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.

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

Eazistrip Continuity System
Leviat also manufacture the Ancon 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
Leviat provides a dedicated service to the concrete sector. The ‘Reinforcement’ team provides technical advice, pricing information, order fulfilment and after sales support. Our 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 reinforcement.uk@leviat.com fax +44 (0) 114 238 1240 or call +44 (0) 114 275 5224 with your enquiry.

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**

<table>
<thead>
<tr>
<th>Bar Dia. (mm)</th>
<th>Stocked Length A (mm)</th>
<th>Max. Bar Length (mm)</th>
<th>Coupler Length L (mm)</th>
<th>Coupler External Dia. d (mm)</th>
<th>Torque (Nm)</th>
<th>Nailing Plate Dia. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>660</td>
<td>6000</td>
<td>58</td>
<td>22</td>
<td>60</td>
<td>70</td>
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<tr>
<td>16</td>
<td>670</td>
<td>6000</td>
<td>70</td>
<td>25</td>
<td>110</td>
<td>70</td>
</tr>
<tr>
<td>20</td>
<td>1075</td>
<td>6000</td>
<td>74</td>
<td>30</td>
<td>165</td>
<td>70</td>
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<tr>
<td>25</td>
<td>1340</td>
<td>6000</td>
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<td>36</td>
<td>215</td>
<td>90</td>
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<tr>
<td>32</td>
<td>1740</td>
<td>3000</td>
<td>112</td>
<td>46</td>
<td>285</td>
<td>90</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Bar Dia. (mm)</th>
<th>Thread dia. (mm)</th>
<th>Stocked Length A (mm)</th>
<th>Max. Bar Length (mm)</th>
<th>Adaptor Length L (mm)</th>
<th>Adaptor External Dia. d (mm)</th>
<th>Nominal Thread Depth (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>M16 x 2.0mm pitch</td>
<td>655</td>
<td>6000</td>
<td>53</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td>M20 x 2.5mm pitch</td>
<td>870</td>
<td>6000</td>
<td>68</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>20</td>
<td>M24 x 3.0mm pitch</td>
<td>1080</td>
<td>6000</td>
<td>78</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>25</td>
<td>M30 x 3.5mm pitch</td>
<td>1345</td>
<td>6000</td>
<td>95</td>
<td>40</td>
<td>25</td>
</tr>
<tr>
<td>32</td>
<td>M36 x 4.0mm pitch</td>
<td>1715</td>
<td>3000</td>
<td>113</td>
<td>50</td>
<td>32</td>
</tr>
</tbody>
</table>

Details for specifying and ordering:
PTSB/Bar Dia./F/Dim. A e.g. PTSB/16/F/1200

#### L-Shaped Bar - Shape Code 11

<table>
<thead>
<tr>
<th>Bar Dia. (mm)</th>
<th>Min. Length A/B</th>
<th>Min. Bend Dia. r</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>165mm / 145mm</td>
<td>24mm</td>
</tr>
<tr>
<td>16</td>
<td>180mm / 150mm</td>
<td>32mm</td>
</tr>
<tr>
<td>20</td>
<td>225mm / 180mm</td>
<td>70mm</td>
</tr>
<tr>
<td>25</td>
<td>280mm / 190mm</td>
<td>80mm</td>
</tr>
<tr>
<td>32</td>
<td>330mm / 210mm</td>
<td>112mm</td>
</tr>
</tbody>
</table>

Details for specifying and ordering:
Tapered Thread TTSB/Bar Dia./F/Dms. A/B e.g. TTSB/16/F/400/600
Parallel Thread Adaptor PTSB/Bar Dia./F/Dms. A/B e.g. PTSB/16/F/400/600

#### Dumbbell-Shaped Bar - Shape Code OO

<table>
<thead>
<tr>
<th>Bar Dia. (mm)</th>
<th>Threaded Stud*</th>
<th>Min. Length A</th>
<th>Min. Length A</th>
</tr>
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<tbody>
<tr>
<td>12</td>
<td>M16 x 52mm</td>
<td>110mm</td>
<td>340mm</td>
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<tr>
<td>16</td>
<td>M20 x 70mm</td>
<td>140mm</td>
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<td>20</td>
<td>M24 x 96mm</td>
<td>190mm</td>
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<td>25</td>
<td>M30 x 125mm</td>
<td>195mm</td>
<td>380mm</td>
</tr>
<tr>
<td>32</td>
<td>M36 x 112mm</td>
<td>230mm</td>
<td>402mm</td>
</tr>
</tbody>
</table>

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

Details for specifying and ordering:
Tapered Thread TTSDB/Bar Dia./M/Dms. A/B e.g. TTSB/16/M/400/600
Parallel Thread Adaptor PTSDB/Bar Dia./M/Dms. A/B e.g. PTSB/16/M/400/600

---

### Loomchamber Bar - Tapered Thread

<table>
<thead>
<tr>
<th>Bar Dia. (mm)</th>
<th>Stocked Length A (mm)</th>
<th>Max. Bar Length (mm)</th>
<th>Torque (Nm)</th>
</tr>
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<tbody>
<tr>
<td>12</td>
<td>625</td>
<td>6000</td>
<td>60</td>
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<tr>
<td>16</td>
<td>830</td>
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<tr>
<td>32</td>
<td>1665</td>
<td>3000</td>
<td>285</td>
</tr>
</tbody>
</table>

Details for specifying and ordering:
TTSB/Bar Dia./M/Dim. A e.g. TTSB/16/M/1000

### Torque Wrench

<table>
<thead>
<tr>
<th>Torque (Nm)</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-285</td>
<td>EB79008</td>
</tr>
</tbody>
</table>
## Enquiry/Order Form

Please photocopy this page and use it to detail your enquiry/order. We can be contacted by email on reinforcement.uk@leviat.com

### 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

| Member | Bar Mark | Type & Size | No. of Members | No. in each | Total No. | Length of Each Bar | Shape Code | Dims. Dimension according to shape code and sketch using the key
|--------|----------|-------------|----------------|------------|-----------|-------------------|------------|------------------------------------------------------------------
| Column 16 | 7 | H25 | 1 | 5 | 5 | 890 | 11 | A = 240  
B = 750 | TTS | Y |

### Torque Wrench: Quantity

<table>
<thead>
<tr>
<th>Date</th>
<th>Order</th>
<th>Enquiry</th>
<th>Delivery Date</th>
</tr>
</thead>
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<table>
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<th>Town</th>
<th>Post Code</th>
<th>Contact</th>
<th>Tel</th>
<th>Fax</th>
<th>Project</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Starter Bar Installation

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

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

2. 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.

3. Continue to screw the bar into the coupler until tight.

4. 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, mechanically bolted and grouted couplers.

Reinforcement Continuity Systems

Ancon Eazistrip is approved by UK CARES and consists of bent bars housed in a galvanised steel casing. Once installed, the protective cover is removed and the bars are straightened, ready for joining to the slab reinforcement. Alternatively, Ancon KSN Anchors are cast into the wall and, when the formwork and thread protection are removed, Bartec Plus threaded rebars are simply screwed into the anchors.

Insulated Balcony Connectors

Thermally insulated Ancon connectors minimise heat loss at balcony locations while maintaining structural integrity. They provide a thermal break and most also provide local insulation at the joint. As a critical structural component they transfer moment, shear, tension and compression forces. Standard solutions are available for concrete-to-concrete, steel-to-concrete and steel-to-steel applications.

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

We offer a wide range of Ancon 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

Leviat designs and manufactures high integrity Ancon steel components for a wide range of industries including Civil Engineering, Building, Infrastructure, Water Treatment, Nuclear and Mining. Projects are supplied worldwide and range from small-scale residential developments to major infrastructure projects.
Innovative engineered products and construction solutions that allow the industry to build safer, stronger and faster.
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