Applications

- Column to Column
- Columns to Foundations
- Shear Walls to Foundations
- Shear Wall to Shear Wall
- Panel to Panel
- Walls to Floor Slab
- Architectural Panels

Grout filled connection designed for moment capacity in precast construction.

Projects

- I-95 Fuller Warren Bridge; Jacksonville, Florida – USA
- Pacific Plaza Office Complex; San Francisco, California – USA
- Houston International for Traffic Control Tower; Houston, Texas – USA
- Olympic Stadium; Alberta, Georgia – USA
- Taj Mahal Casino Parking Garage; Atlantic City, New Jersey – USA
- Corcoran Place; Corcoran, California – USA
- Arena Central; Birmingham – UK
- Salamanca Street; London – UK
- Office Development; Dartford, Kent – UK
- Sydney Stadium; Sydney – Australia
- Mazeikiu Nafta Refinery; Mazeikiai – Lithuania
- Terminal 5; Heathrow Airport – UK
- One Hyde Park Apartments; London – UK
- Athlete’s Village London 2012 Olympics; Stratford City, London – UK
- Highbury Square; London – UK

nVent LENTON Interlok
The Splicing Solution for the Precast Concrete Construction Industry

Our powerful portfolio of brands:

CADDY  ERICO  HOFFMAN  RAYCHEM  SCHROFF  TRACER

WARNING:

nVent products shall be installed and used only as indicated in nVent’s product instruction sheets and training materials. Instruction sheets are available at nVent.com/ERICO and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent’s instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.

© 2018 nVent. All nVent marks and logos are owned or licensed by nVent Services GmbH or its affiliates. All other trademarks are the property of their respective owners.

nVent reserves the right to change specifications without notice.

nVent.com/LENTON
The rivent LENTON Interlok provides a cost effective and quick option with a dramatic increase in design flexibility of precast concrete elements. rivent LENTON’s growing product portfolio stands testament to the advantages provided by the system. Interlok has been used in construction of parking structures, hospitals, high rises, stadiums, bridges, air traffic control towers and many other types of projects.

**Benefits of Interlok:**
- Ensures structural integrity between the precast sections.
- Provides load path continuity of the reinforcement, allowing use one continuous bar.
- Designed for high yield deformed rebar sizes from #1 to #10 (8 mm to 25 mm).
- Eliminates flexural damage to concrete.
- Helps overcome rebar misalignment problems in joining of precast concrete members.
- Offers a higher strength connection between the precast elements than traditional joining methods.
- Eliminates costly and lengthy postwork.
- No closure pours required between adjacent members.
- Tension and compression are transferred through the rebar and are not dependent on the compressive strength of the concrete.
- Optimizes production time and is convenient and flexible to use.

Construction in precast concrete is gaining popularity worldwide. Structures which were previously only possible with cast in-situ concrete are now being constructed using precast concrete. To facilitate this process, special rebar splicing systems are needed to increase the structural integrity of precast concrete structures.

A leader in reinforcing bar splicing, rivent LENTON has developed the Interlok system as the solution to creating a strong continuity between precast concrete elements. The Interlok can connect #5 1/2 mm through #12 7/8 mm rebar using the rivent LENTON taper threaded system and a special high strength grout. The result is a full strength splice that is reliable, forgiving to rebar misalignment and, as no closure pour is required, underbelly efficient. Architects and engineers are now afforded previously unattainable design flexibility in the design and application of precast concrete elements, while gaining efficiencies in construction time, cost and aesthetics. Load-bearing applications such as columns, beams and shear walls can now be efficiently incorporated into projects using segmental precast construction techniques, where previously, only structural steel or cast in-situ concrete would have been considered.

The complete splice provides load path continuity allowing precast concrete structures to function as continuous members. A detailed installation guide is available from rivent outlining correct installation, grout mixing and manufacturers recommended installation procedures.

**How to Install:**

The Interlok couplers are fastened to the rebar and placed into the precast concrete. Easy-to-use modular form-mounting fixtures are available for the purpose. The Interlok incorporates a taper thread which creates a positive lock that seals the coupler. This threaded system aids the alignment of the coupler onto the rebar, providing a full strength mechanical connection in both tension and compression.

The Interlok system is easy to use, reusable, and no special training or external power is required. The Interlok can be either poured or pumped into the precast form. A detailed installation guide is available from rivent outlining correct installation, grout mixing and manufacturers recommended installation procedures.

**How to Specify:**

*By Name:* Mechanical splices will be Interlok, manufactured by rivent LENTON.

*Generic:* Mechanical reinforcing steel splices shall meet building code requirements of developments in reinforcing steel and concrete splicing systems. Rivent LENTON shall be produced as casting from ductile iron conforming to ASTM A536. Standards. One end of the sleeve shall consist of a threading that mates with the opposite end, while the accompanying cylindrical sleeve is designed with equally spaced concentric ribs. Grooving must be performed in accordance with the manufacturers recommended installation procedures.

**Product Specs:**

<table>
<thead>
<tr>
<th>Rebar Size Designation</th>
<th>Number of Clusters</th>
<th>Couplers</th>
<th>Art. No.</th>
<th>Rod A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>#5 15 34 28</td>
<td>1 45575 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#6 20 25 20</td>
<td>1 45580 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#7 25 21 20</td>
<td>1 45585 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#8 30 20 15</td>
<td>1 45590 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#9 35 20 10</td>
<td>1 45595 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#10 40 15 5</td>
<td>1 45600 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#11 45 10 2</td>
<td>1 45605 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#12 50 10 1</td>
<td>1 45610 7-1/16 3 7/16 1 5/8 1-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Interlok taper threaded sleeve keeps the coupler in a fixed location during the grouting process. The Interlok coupler has been designed to increase field tolerance of the rebar dowels.

**Product Data Sheet:**

The Interlok system is designed to be a reinforcing steel splice that will meet building code requirements of developments in reinforcing steel and concrete splicing systems. The Interlok sleeve is manufactured from ductile iron conforming to ASTM A536 and is permanently locked to the rebar using a threaded connection. Standard 1/2” and 3/4” rigid PVC or flexible plastic tubes can be placed into the precast forms. Easy-to-use, reusable, no special training or external power is required.

**Product Description:**

The Interlok taper threaded sleeve keeps the coupler in a fixed location during the grouting process. The Interlok coupler has been designed to increase field tolerance of the rebar dowels.

**Product Applications:**

Interlok can be used to join rebar from precast concrete elements. The Interlok system is easy to use, reusable, and no special training or external power is required. The Interlok can be either poured or pumped into the precast form. A detailed installation guide is available from rivent outlining correct installation, grout mixing and manufacturers recommended installation procedures.

**Usage:**

The Interlok system is designed to be a reinforcing steel splice that will meet building code requirements of developments in reinforcing steel and concrete splicing systems. The Interlok sleeve is manufactured from ductile iron conforming to ASTM A536. Standards. One end of the sleeve shall consist of a threading that mates with the opposite end, while the accompanying cylindrical sleeve is designed with equally spaced concentric ribs. Grooving must be performed in accordance with the manufacturers recommended installation procedures.

**Dimensions:**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside Diameter</td>
<td>mm</td>
<td>13</td>
</tr>
<tr>
<td>Outside Diameter</td>
<td>in.</td>
<td>0.5</td>
</tr>
<tr>
<td>Length</td>
<td>mm</td>
<td>20</td>
</tr>
<tr>
<td>Length</td>
<td>in.</td>
<td>0.79</td>
</tr>
<tr>
<td>Embedment Depth</td>
<td>mm</td>
<td>176</td>
</tr>
<tr>
<td>Embedment Depth</td>
<td>in.</td>
<td>6.93</td>
</tr>
<tr>
<td>Taper Angle</td>
<td>°</td>
<td>-</td>
</tr>
<tr>
<td>Total Angle</td>
<td>°</td>
<td>-</td>
</tr>
<tr>
<td>Collar Width</td>
<td>mm</td>
<td>4</td>
</tr>
<tr>
<td>Collar Width</td>
<td>in.</td>
<td>0.16</td>
</tr>
<tr>
<td>Lock Nut Diameter</td>
<td>mm</td>
<td>14</td>
</tr>
<tr>
<td>Lock Nut Diameter</td>
<td>in.</td>
<td>0.55</td>
</tr>
</tbody>
</table>

**Usage:**

The Interlok system is designed to be a reinforcing steel splice that will meet building code requirements of developments in reinforcing steel and concrete splicing systems. The Interlok sleeve is manufactured from ductile iron conforming to ASTM A536. Standards. One end of the sleeve shall consist of a threading that mates with the opposite end, while the accompanying cylindrical sleeve is designed with equally spaced concentric ribs. Grooving must be performed in accordance with the manufacturers recommended installation procedures.

**Usage:**

The Interlok system is designed to be a reinforcing steel splice that will meet building code requirements of developments in reinforcing steel and concrete splicing systems. The Interlok sleeve is manufactured from ductile iron conforming to ASTM A536. Standards. One end of the sleeve shall consist of a threading that mates with the opposite end, while the accompanying cylindrical sleeve is designed with equally spaced concentric ribs. Grooving must be performed in accordance with the manufacturers recommended installation procedures.

**Usage:**

The Interlok system is designed to be a reinforcing steel splice that will meet building code requirements of developments in reinforcing steel and concrete splicing systems. The Interlok sleeve is manufactured from ductile iron conforming to ASTM A536. Standards. One end of the sleeve shall consist of a threading that mates with the opposite end, while the accompanying cylindrical sleeve is designed with equally spaced concentric ribs. Grooving must be performed in accordance with the manufacturers recommended installation procedures.

**Usage:**

The Interlok system is designed to be a reinforcing steel splice that will meet building code requirements of developments in reinforcing steel and concrete splicing systems. The Interlok sleeve is manufactured from ductile iron conforming to ASTM A536. Standards. One end of the sleeve shall consist of a threading that mates with the opposite end, while the accompanying cylindrical sleeve is designed with equally spaced concentric ribs. Grooving must be performed in accordance with the manufacturers recommended installation procedures.