Turkington Holdings Limited

Turkingtons was founded in 1951, by Harry Turkington. The company has remained in family ownership and has grown to become a leading light in the Construction Industry. We operate across various sectors of the industry acting as Main Contractor and Developer through the Construction Division, and also providing specialist sub-contracting and supply expertise through our Windows, Curtain Wailing and Precast divisions. We also offer facilities management services to ongoing PFI/PPP contracts.

Our ethos is one of quality, honesty and reliability. We have developed an excellent reputation for the quality of our workmanship, our product and our customer service. We operate a Total Quality Management system and have ISO accreditation for Quality, Environmental and Health & Safety.

The main operating divisions of Turkington are:

- Turkington Precast
- Turkington Construction
- Turkington Aluminium & PVC
- Turkington Property Developments
- Turkington Windows & Conservatories
 Turkington Precast

Turkington Precast was formed in 1985 to specialise in the manufacture and supply of quality engineered concrete products direct to the construction industry and transportation authorities. We have over 15 years experience within the rail industry manufacturing pre-stressed concrete sleepers which are used in high speed, main-line railway track applications and railway lines across Ireland and the UK.

Our dedicated long-line manufacturing and storage facility is undertaken on a dedicated 40 acre site in Portadown, Northern Ireland. We have a current capacity of 80,000 sleepers per annum with the flexibility to expand. All the appropriate and calibrated equipment including curing and testing equipment is retained within the one facility. Our specialised team is dedicated to solely manufacturing and testing sleepers guaranteeing that we are continually meeting our required specifications. This process is continually monitored internally and externally as part of our ISO 9001:2008 and Link-up accreditations.

Our dedicated in-house engineering and design team offer advice and assistance in the specialist design, specification and manufacture of individual sleeper requirements. Once designed and prototype manufactured our sleeper range is rigorously tested at the ‘Technische Universita Munchen’.
G44 Sleepers

Network Rail Approved
Can be used on all types of track, except where 3rd rail electrification is used.

Used with:
• BS113A or CEN60 rail.
• Pandrol ‘e’ clip system.

Manufactured in accordance with:
• Network Rail specification NR/SP/TRK/030.
• Turkington quality control system ISO 9001:2008.

Nominal maximum weight:
• 309kg + 3kg for loose fastening components.

5F40 Sleepers

Network Rail Approved
Can be used on all types of track, except where 3rd rail electrification is used.

Used with:
• BS113A.
• Pandrol FASTCLIP system.

Manufactured in accordance with:
• Network Rail specification NR/SP/TRK/030.
• Turkington quality control system ISO 9001:2008.

Nominal maximum weight:
• 295kg.
**TIR6 Sleepers**

Irish Rail Approved  
Can be used on all types of track, except where 3rd rail electrification is used.

Used with:  
- UIC54 or UIC60 rail.  
- Vossloh W14 fastening.

Manufactured in accordance with:  
- Irish Rail specification.  

Nominal maximum weight:  
- 307kg + 7kg for loose fastening components.

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**NIR01 Sleepers**

Northern Ireland Rail Approved  
Can be used on all types of track, except where 3rd rail electrification is used.

Used with:  
- BS113A/56E1 rail.  
- Pandrol ‘e’ clip system or PR401

Manufactured in accordance with:  
- Northern Ireland Rail specification.  

Nominal maximum weight:  
- 312kg
**Systems and Accreditations**

**Quality Assurance**

Turkington Precast are approved and audited by BSI in order to conform with our ISO accreditations. Our in-house IMS team monitor procedures and practices daily to ensure all requirements are maintained and recorded. We continually strive for improvement in all areas of production and supporting procedures. We are approved and audited suppliers of Network Rail, Iarnród Éireann (Irish Rail) and Northern Ireland Rail. We pride ourselves on offering quality in design, manufacturing and delivery of the final product.

Our efforts have been recognised in recent years by successfully winning the Environmental Sustainability award and Training award at the CEF/Specify Construction Excellence Gala.

**Long-line Casting**

To maintain our standards great care is exercised in the selection of materials to ensure the long-term durability of the concrete. Consideration is given to the requirements for freeze-thaw resistance, porosity and abrasion resistance.

Before any concrete is poured the production line is cleaned and then inspected by qualified staff. Computer controlled batching allows the optimum concrete strength to be achieved while maintaining the workability required. Each batch of concrete produced is recorded with all details available for quality control.

As soon as the filling process has been completed, the moulds are covered with insulated drapes thus retaining moisture to prevent premature drying. When required, accelerated curing can be achieved by means of evenly heating the long line moulds. The system is programmed to maintain the required temperature whilst not exceeding the maximum permitted temperature. Secondary temperature probes are placed at several positions on the production line with values recorded and checked by quality control. Once and only once the required concrete strength is achieved can de-moulding of the sleepers begin.

**Product Testing**

To maintain the consistent quality expected and required from our customers a sample batch is removed from each production run completed. All dimensions are measured to the product specification, within stated tolerances. Seven tests are carried out daily, one for each line. This is done in such a way that all moulds are checked, and then repeated again. Data from this testing system allows maintenance of the moulds to be completed to ensure standards are maintained.

**Stacking & Handling**

Once de-moulded, the sleepers are removed from the factory and carefully placed in our stock yard. To allow stacking of the sleepers timber skids are placed along the rail seat area, these skids protect the fastening system and allow forklifts to easily manoeuvre the sleepers where required.

**Despatch & Delivery**

Our close proximity to national transportation networks ensures that we can economically service Ireland and Great Britain.
Sleeper Design Values

<table>
<thead>
<tr>
<th>Type</th>
<th>Gauge (mm)</th>
<th>Rail</th>
<th>Fastening Type</th>
<th>Length (mm)</th>
<th>Depth at rail set (mm)</th>
<th>Nominal Maximum Weight (kg)</th>
<th>Bending Moments Rail Seat</th>
<th>Centre Negative (kN.m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G44</td>
<td>1438 or 1436</td>
<td>BS113A or CEN60E1</td>
<td>Fastclip</td>
<td>2500</td>
<td>200</td>
<td>312</td>
<td>27.8</td>
<td>12.5</td>
</tr>
<tr>
<td>5F40</td>
<td>1435</td>
<td>BS113A</td>
<td>'e' clip</td>
<td>2420</td>
<td>200</td>
<td>295</td>
<td>23.4</td>
<td>5.4</td>
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<tr>
<td>TIR6</td>
<td>1602</td>
<td>UIC54 or UIC60</td>
<td>Vossloh W14</td>
<td>2600</td>
<td>220</td>
<td>314</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>NIR01</td>
<td>1600</td>
<td>BS113A/56E1</td>
<td>'e' clip</td>
<td>2590</td>
<td>200</td>
<td>315</td>
<td>21.6</td>
<td>5.4</td>
</tr>
</tbody>
</table>

When ordering please specify the rail type to be used.

ISO Accredited

Turkington Precast is approved and audited by BSI to ensure it conforms to its three ISO accreditations:

- 9001:2008 (Quality);
- 14001:2004 (Environmental); and
- 18001:2007 (Health and Safety).

Being an accredited Link-up provider means we have the opportunity to connect to a network of potential buyers across our industry. It helps ensure we are automatically visible to our customer base and gives them confidence and re-assurance that we as a supplier are continually meeting their expectations on quality and compliance information.

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