What’s New In Modular Road Plate Applications

NGA Spring Operations Conference
April 2017
The soundtrack to a busy workzone
A spotlight on liability and compliance

To safeguard our public and our employees – as well as our businesses – we must proactively manage liabilities.

- We are all increasingly and directly accountable
- Performance measures require safety to be guaranteed
- Legislation is continuously evolving
- We live in an increasingly litigious society
What’s your experience?
The evolution of quieter, safer workzones
Composite v Steel Installation
No more heavy lifting equipment

Composite plates are lighter than steel alternatives and can be installed in minutes by two people.

- Quick and easy to deploy
- Downtime is minimized
- No heavy lifting equipment is required
- Stow easily in a standard truck

Two man lift

Lower into position

Do not throw or drop on to edge

Lift by hand
Do not use tools to aid lifting

Store on a pallet
Composite solutions are safe solutions – by design.

- Slip-resistant surface
- Chamfered, soft leading edges
- Noise pollution is eliminated
- No need to close sidewalks
- Liability is minimized
- Drop pins increase stability
Zero ongoing maintenance costs

The permanent anti-slip surface and hi-vis yellow composite material means that ongoing maintenance costs are eliminated.
More dollars to the bottom line

Real dollar savings associated with composite products protect your profits.

- Delivery and collection costs are significantly reduced
- Site security issues are eliminated – zero scrap value
- Robust solution – no need to replace during streetworks
- No barriers required
Are you compliant?

The latest composite products meet the evolving needs of contractors, and adhere to new regulations and changing legislation.

- USA approval HS20-44
- Slip resistance in accordance with city requirements
The latest heavy duty composite Road Plates have been designed for roads and sidewalks.

A modular system is made up of individual units that link together for the ultimate flexibility.

The innovative integral flexible edge has been engineered using a PVC compound to minimize road noise, and can also compensate for cambers in the road.

There’s no need for large lifting equipment – the systems can be installed in minutes by two people, and can be easily stowed in a standard truck.

Drop pin system prevents lateral movement.

**ROAD PLATE END**

- Product No 0814
- Length - end to end 59.1"
- Width 19.7"
- Weight 51lbs
- Number per pallet 20
- Color Yellow

**ROAD PLATE INNER**

- Product No 0830
- Length - end to end 59.1"
- Width 19.7"
- Weight 88lbs
- Number per pallet 20
- Color Yellow and Black

**CURRENT SPEED HUMPS IN USE**

Conventional Steel Plates

Oxford Road Plates
Flexible, versatile and easy to deploy

- **Eliminate noise complaints**: the composite material and soft leading edge make the road plate ideal for urban areas where noise is a concern

- **Traffic calming effect**: motorists perceive the road plates as a giant speed bump as they have a soft leading edge and are hi vis yellow

- **Increased productivity and safety**: movement around site is quick and easy – plates are easy to handle and will load into a works truck

- **Equipment utilization is improved**: fast, two-man deployment means no heavy lifting equipment is required and downtime is minimized

- **Mitigate risk**: rapid deployment / removal makes it easy to comply with rush hour permits

- **Reduce reinstatement costs**: as there is no requirement to recess Road Plates, road reinstatement is less expensive

- **Improved site security**: road plates have no scrap value

- **Improved efficiency**: modularity of panels provides a flexible, safe working environment and makes traffic flow more consistent

- **Reduced maintenance costs**: permanent anti-slip surface and hi vis yellow composite material eliminate ongoing maintenance costs associated with reinstating anti-slip surface and painting wood / steel

- **Eliminate costly shipping**: the cost of deploying and collecting steel plates from site is expensive
Current practice – and a new solution

Utilities work using conventional steel plates

Utilities work using composite road plates
"I came across Oxford’s composite road plates in an industry publication and thought they would be a great fit for a National Grid project where we would be burying power lines. The project required trenching across driveways and cross streets in a residential development. Because Oxford’s plates can be handled manually, we were able to run smaller machines. Combining that with how much quicker and safer Oxford plates are to set, we ended up with a huge cost savings!"

~ Mike Hevey, PE
J.H. Lynch Construction
Although everything has its limitations 😊
Any questions?
What’s New In Modular Road Plate Applications?
Developed in collaboration with leading utility contractors

Version 23-5 Composite Modular Road Plate
Composites Keeping Sidewalks Open
Case Study Trench Covers: NYC Installation

Oxford’s 16/12 Trench Covers are in use on NYC sidewalks as part of gas main works by major utility contractors.
The new LowPro 15/10 Driveway Board uses our patented flexi-edge system to reduce trip hazards for pedestrians and prevent unwanted movement.

- Conforms to National Grid Footway Board Specification T/SP/E/42
- Heavier than traditional trench covers thanks to PVC anti-slip edge
- Lighter than steel road plates – easy to maneuver and transport
- Central section made from glass reinforced composite
- Covers 3 ft trench for 3.5 t vehicles, and 4 ft trench with pedestrian traffic up to 882 lbs. traversing it
- Gas vents and probe hole designed-in
- Shock resistant
Composites Keeping London Moving
Case Study: Keeping London Moving

On city streets traffic flow disruptions have huge costs.

Removing the need for lane closures and increasing the speed and safety of putting them back in service was the top priority for this initiative.

Why did Oxford Plastic Systems’ Road Plates win the bid?

<table>
<thead>
<tr>
<th>Steel Road Plates</th>
<th>Oxford Plastics Road Plates</th>
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<tbody>
<tr>
<td>Slippery when wet</td>
<td>Integrated anti-skid surface</td>
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<tr>
<td>Expensive to resurface</td>
<td>No cost, integrated anti-skid surface</td>
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<tr>
<td>Expensive to transport</td>
<td>1/3 the weight per LF of trench coverage</td>
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<td>Expensive to deploy</td>
<td>From storage to job site deployed in a fraction of the time</td>
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<td>Time consuming to deploy</td>
<td>Manual installation vs machine – minutes vs hours</td>
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<td>Danger to life and limb/ liability</td>
<td>6 years in the field and not one injury due to handling</td>
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<td>Requires expensive coating to make visible to motorist</td>
<td>Manufactured in hi-visibility yellow</td>
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Roadworks are a massive headache for Londoners, also levying a heavy toll on our economy.

The new pledge states that roadworks should be tidy and safe, have clear signage and information for the public, not take up too much space and help as much as possible to keep traffic moving.

Boris Johnson
Former Mayor of London
Thank you

NGA Spring Operations Conference
April 2017

David Sardinha
Oxford Plastic Systems
Oxford Plastic Systems Ltd is the leading independent UK manufacturer of the world’s most innovative range of site safety solutions.

Established in 1985 as a trade moulding specialist, Oxford Plastics Systems has a wealth of expertise in the design and engineering of innovative, customised safety products, which are deployed every day within safety critical applications within utilities, construction, industrial, highway works and events projects around the globe.

Guaranteeing compliance with the latest legislation, our award-winning portfolio includes barriers, road plates and trench covers, signs and cones, ground protection mats and heavy bases.

We invest heavily in research and development, working in partnership with our customers to meet their evolving needs, and designing and developing solutions to the industry’s greatest challenges in terms of safety and compliance.

With expertise in the sustainable design and manufacture of injection, compression and blow moulded products, 75% of our products are made from recycled plastic, and 100% are recyclable.

We invest in our production processes
- Purpose built manufacturing facility
  - Compression molding lines
  - Injection molding lines
  - Blow molding capability
- Significant investment (>10% of turnover) in capital equipment and research and development activity
- Continual investment in capacity and automation improvements
- Independent review by Manufacturing Advisory Service (MAS) for best practice and efficiency
- Delivery of a turnkey solution from initial concept design to full commercial production
- Broad range of raw materials handling capabilities

We maintain our position at the forefront of the industry

Members of key industry associations including:
- NUCA Safety Ambassadors Club
- Nat’l Partner NUCA (National Utility Contractors Association)
- AFA (American Fence Association)
- NASTT (North American Society for Trenchless Technologies)
- GCA of NYC (General Contractors’ Association of NYC)
- NGA (Northeast Gas Association)
- APWA (American Public Works Association)
- AEM (Association of Equipment Manufacturers)

We are a specialist UK manufacturer
- 75,000 square ft manufacturing and warehousing facility with commercial headquarters
- Based near to high technology center, Oxford UK
- Manufacture to EN ISO 19001 Quality Standard
- 2014 turnover $27m
- 80 employees
Can we get samples to trial?
Free of charge trial samples can be supplied directly from a local distributor on a one week lead time.
We will work with you to expedite the samples, trial your scope of works and will support the evaluation period.

Is training available?
Yes, we can provide comprehensive training in the field as part of your wider works schedule to ensure that performance is optimised throughout the product lifecycle.
Training includes pre-use inspection to ensure optimum safety and performance every time.
We also provide comprehensive instruction to ensure a safe and efficient installation process as well as a guide to the correct handling and storage.
Training is available across multiple geographical locations, and can be provided to both main and sub-contractors.

We want to roll-out: what is the lead time for a container load of branded products?
A typical 20ft container will hold 250 trench covers.
Our lead time is 3 weeks from receipt of order plus 2 weeks freight.
Unbranded products are available ex-stock in the US via our distribution network.