Underground Construction Technology
International Conference & Exhibition
TRACK XI = UNDERGROUND UTILITIES CONSTRUCTION Wed, Jan 31st 9 - 9:25am

The ‘End Of The Road’ For Noise Complaints
Improving the Safety and Image of Urban Work Zones

A Comparison of Composite Road Plates to Steel Road Plates

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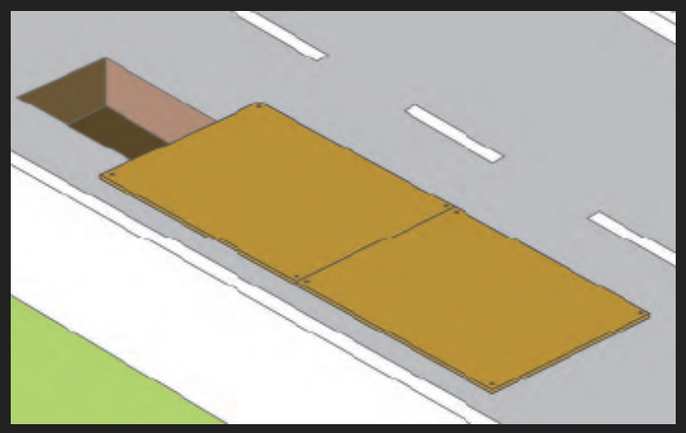
“Innovation distinguishes between a leader & a follower” ~ Steve Jobs

REQUIREMENTS

- HS20-44 rated
- Road plates anchored to the roadway
- Ramping leading & exit edge
- Anti-slip surface
- Local rules- ie- recessed, high visibility color

STEEL ROAD PLATES

- COMPLIANT steel road plates
- Certified A36 Steel
- Sized correctly for the trench opening
- Anchoring
- Ramping
- Handling



COMPOSITE ROAD PLATES

- Compliant with HS20-44
- Two man lift versus heavy lifting equipment
- Permanent anti-slip surface
- Modular system made of individual sections that link together
- Manufactured from special formulated molded fiberglass, encapsulating a steel grid
- The innovative integral Flexi-Edge has been engineered using a PVC compound to minimize road noise, and can also compensate for cambers in the road
- Drop pin system prevents lateral movement and improves stability
- Designed for roads and sidewalks

WHY USE STEEL ROAD PLATES?

- Can span a wider range of trenches
- Can be used as shoring when not covering a trench
- Widespread availability
- Compliant with HS20-44

DRAWBACKS WITH STEEL ROAD PLATES

- Cost of moving steel road plates
- Hazard to workers and public if handled incorrectly & costs associated with this
- Ongoing costs to keep compliant

PROS

WHY USE COMPOSITE ROAD PLATES?

- Reduces noise complaints
- Increased productivity and safety
- Equipment utilization is improved
- Mitigate risk
- Reduce maintenance cost
- Reduce handling & transport cost

DRAWBACKS WITH COMPOSITE PLATES

- Limited trench width
- Limited availability
- Cannot be used for shoring

BEST PRACTICES

COMPOSITE ROAD PLATES: INSTALLATION & DISMANTLING

Installation Guide

- Check the trench width does not exceed 27.6”with15/05; 36” with 23/05
- Check the steel drop pins are properly working
- Make sure the plates are placed centrally over the trench
- Lock plates together with built-in steel linking pins
- Once all the plates are in place, anchor the end sections
- End sections must be anchored to the roadway by a min. of 2 bolts
- Once securely anchored, suitable for a 97,000 Ib vehicle

Dismantling

- Remove the anchor bolts from the end sections
- Starting from one end, lift the plates to disengage the linking system
- Stack securely for transportation and store in a safe environment

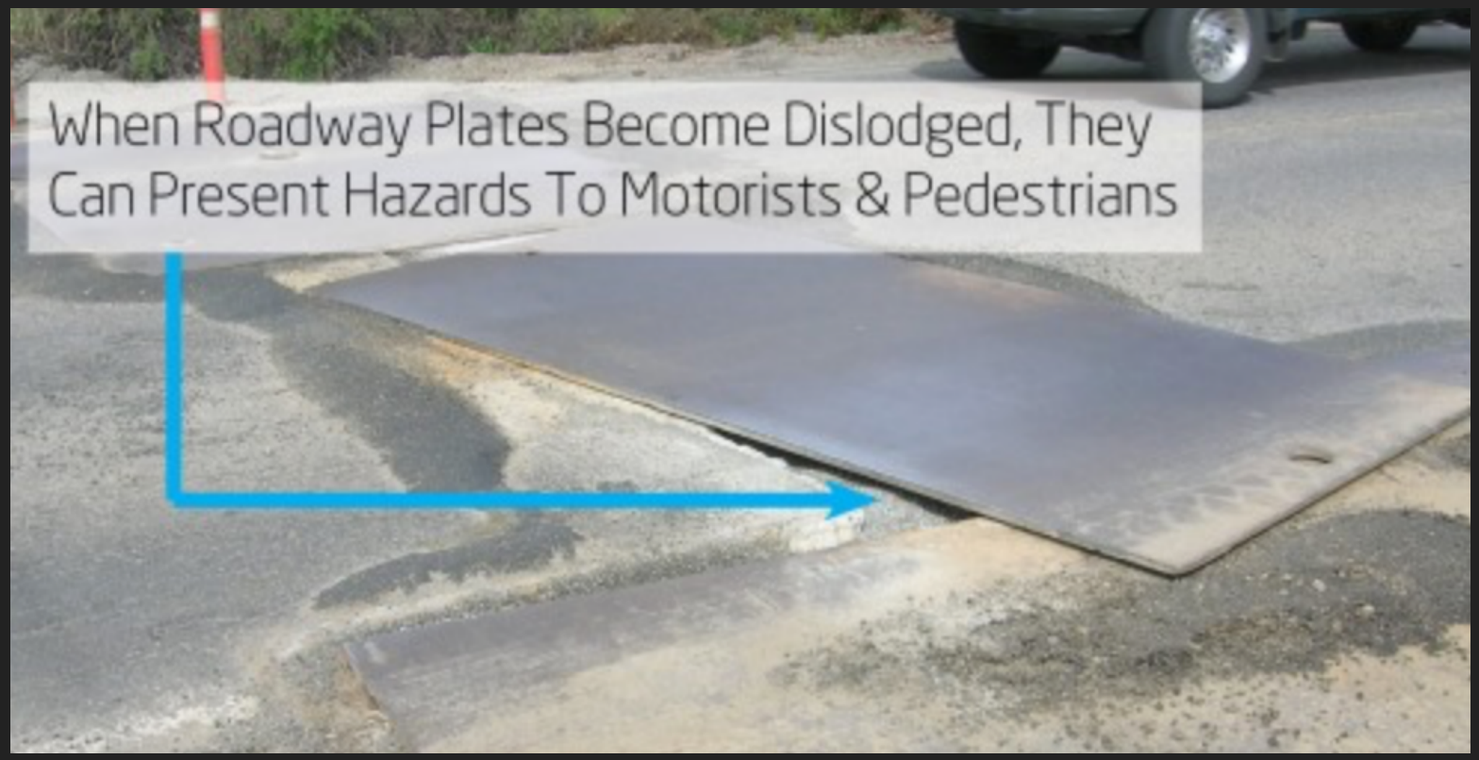
STEEL ROAD PLATES: INSTALLATION & DISMANTLING

Installation Guide

- Inspect for damage
- Confirm trench width
- Plates should be centrally located over trench
- Weld adjoining plates
- Anchor/ Pin plates to road
- Provide ramped leading edge

Dismantling

- Remove ramped edge
- Remove anchor bolts
- Lift and load

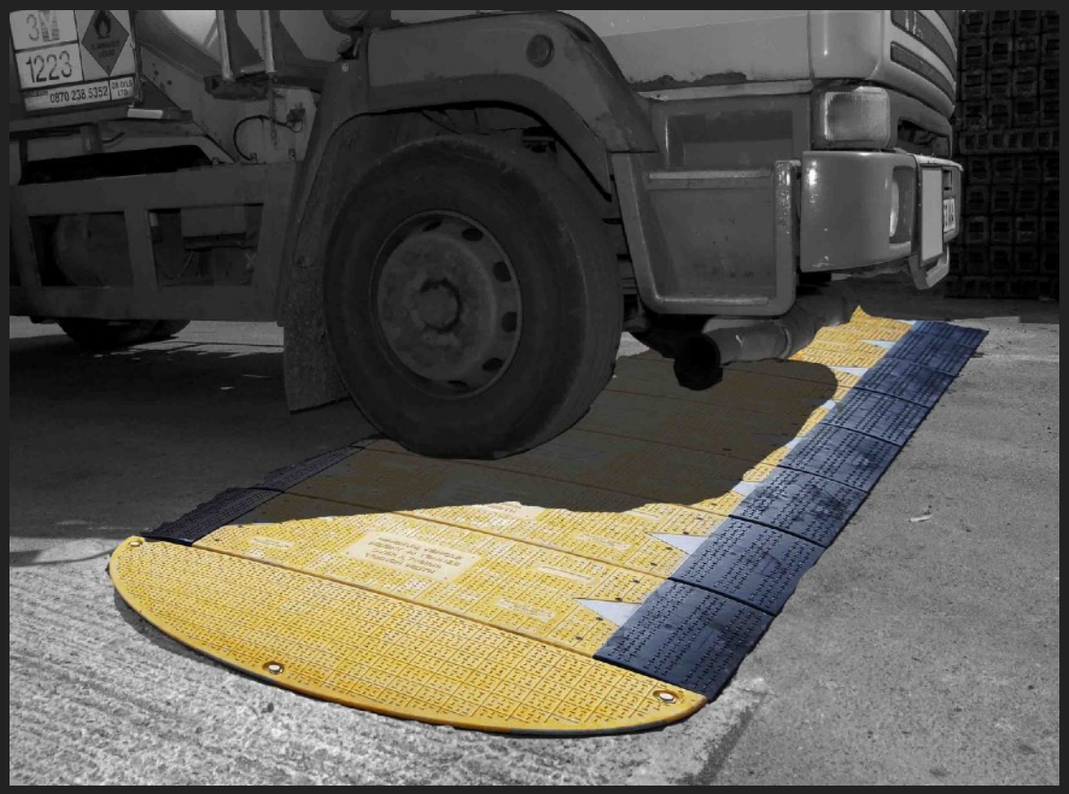


COMPOSITE ROAD PLATES IN USE

VIDEO OF COMPOSITE ROAD PLATES AT 40MPH

FAQ

- What is the best way to store and move composite road plates



- How did the idea of composite road plates come into being?

- Who are some of the leaders in the industry that use road plates?

THANK YOU

"If you always do what you always did, you will always get what you always got." ~ Albert Einstein

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