

# Composite Road Plate System

The Radlock Carriageway System is a lockable composite road plating system comprising of inner and end composite road plates with flexible edges. The composite road plates are held in line by integral steel hooks, which hold the boards closely together, and are secured with the Radlock Series 15 locking mechanisms, which hold the plates in place by operating the extending legs into the sides of an excavated trench.



### Inspection:

Prior to each use of the Radlock carriageway system, a visual inspection should be carried out in order to check for cracks, cracked welds and missing or damaged parts on the composite road plate and the Radlock Series 15 locking mechanism. Measure the excavation to ensure that the carriageway system will completely cover the excavated trench, allowing for the two end board flexible edges to fit in the available space prior to excavating the trench/hole.

### Safety guidelines:

- Maximum Trench Width 700mm.
- Maximum vehicle weight 44000kg - 5750kg Single Wheel Load.
- Each Radlock Series 15 locking mechanism weighs 5.2kg.
- Each inner composite road plate weighs 44kg and can be lifted using manhole keys by two operatives.
- Each end composite road plate weighs 48kg and can be lifted using manhole keys by two operatives.
- Check the condition of each Radlock Series 15 locking mechanism and each composite road plate prior to installation.
- Maximum vehicle speed over the system is 30mph (recommended safe max 10mph).
- Risk Assessments and Method Statements must be agreed with Site Supervisor and 'RAMP' signs may be required to warn motorists.
- All Radlock Locking mechanisms must be regularly greased on the threaded bar to ensure ease of use.

### Equipment required:

- Turning mechanism or wrench c/w 24mm socket
- Manhole lifting key (2No.)

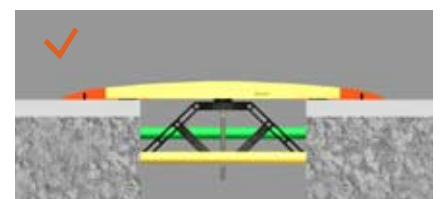
### Dos & Don'ts:



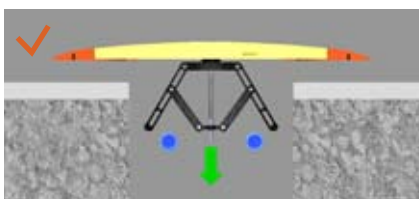
Check for services before engaging the Radlock



Turn the wrench clockwise until the arms of the lock key into the sides of the trench



Ensure that the arms of the Radlock do not interfere with pipes or cables



Partially open the radlock before lowering the plate if necessary



Take care to excavate a sheer trench



Do not attempt to open the Radlock between pipes or cables

Step by step installation instructions follow on page 2

# Composite Road Plate System

## Installation:

Align the first composite road plate (end board) centrally over the excavated trench at the start of the excavated trench.



Prior to fixing the composite road plate over the excavation, tilt the plate on edge in order to attach the Radlock Series 15 locking mechanism to the bayonet plate, located on the underside of each plate. Turn the Radlock series 15 lock into the Bayonet plate to secure it.



The Radlock series 15 lock is secured to the bayonet fitting by tightening the thumb screw attached to the lock. Once the first end composite road plate is in position, place the turning mechanism through the pre-drilled hole in the plate surface, locating onto the Radlocks' threaded bolt and rotate clockwise to key the arms of the Radlock into the sides of the excavation.



Using the manhole lifting keys to carry it, fit the first inner board against the end board previously installed locating it gently. Once the male locators are through the openings, pull the board in the direction indicated on the surface of the board to engage. Once all locators are engaged, rotate the turning mechanism to key the arms of the Radlock into the sides of the excavation.



Repeat step 4 for the remaining inner plates, complete the run with the remaining end board.

Check that all of the Radlock locking mechanisms are suitably tightened and that the system is installed correctly before leaving site.



## Dismantling:

In order to remove the composite road plates, disengage the Radlock by rotating the turning mechanism anticlockwise.

