

# TECHNICAL DATA SHEET



## SLEEPER INSTALLATION

### CRITICAL INSTALLATION PROCEDURES

#### TRACK PANEL

Compact footwall sloping 1:20 towards the drain

#### FOUNDATION

Use graded, washed ballast 37.5mm to 53mm in size



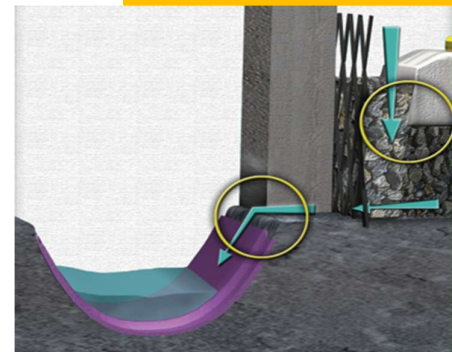
#### BALLAST

- Only tamp directly beneath the rail seats, leaving loose ballast underneath the middle of the sleeper.
- Ballast around head of sleepers
- Ballast up to 30mm below the flange of the rail.



#### WATER

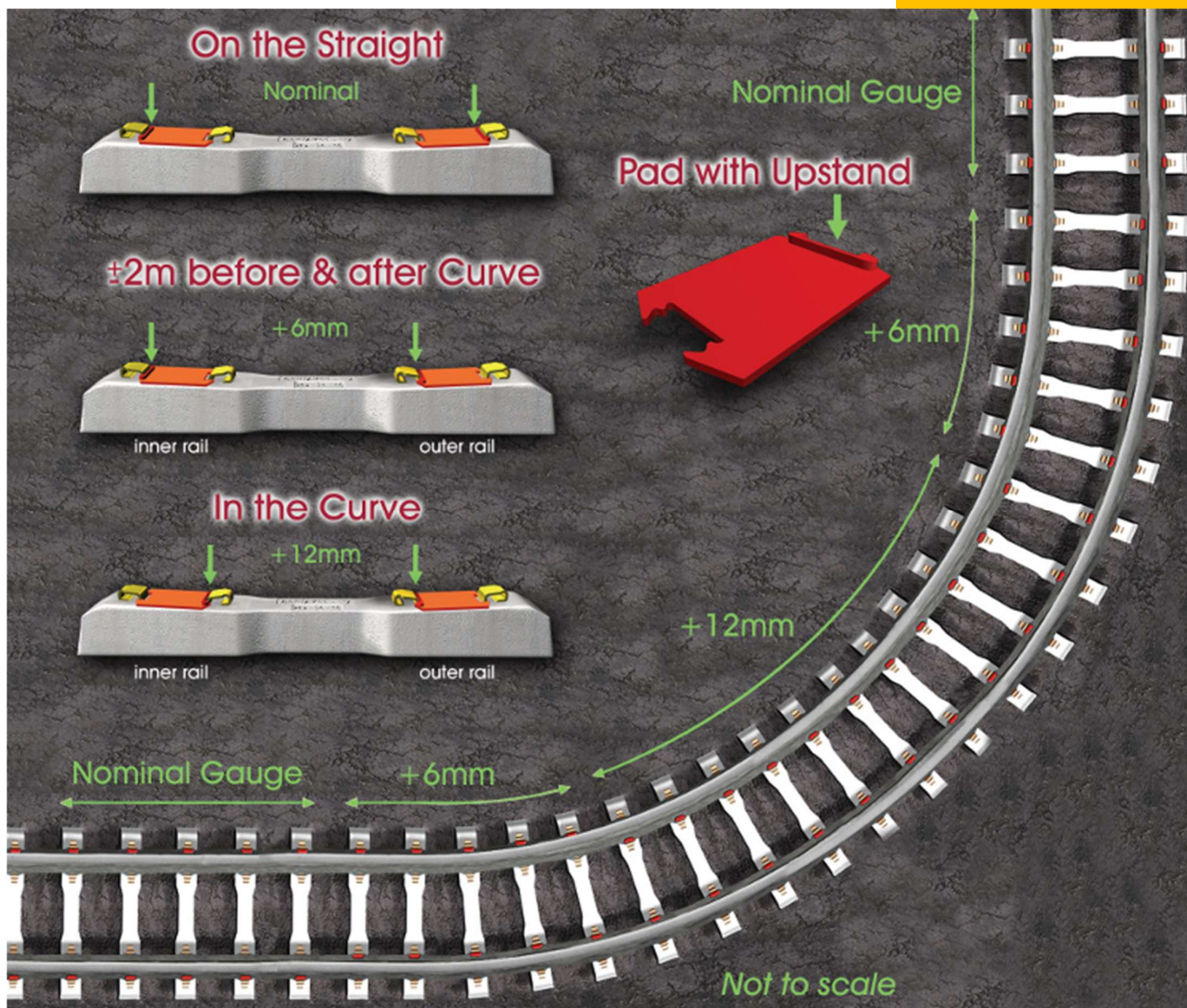
- Use Rainbow Mining Support Flolok drains to keep water away from the track panel.
- Top of drain sections must be below the elevation of the sleeper base.



#### FISHPLATES

- Use male and female fishplates
- Install fishplates with arrows pointing upwards
- Install female fishplates on the inside of the rail
- Recommended end joint space 250 – 300mm to centre of sleeper.





## GAUGE WIDENING FOR 10 TONNE SLEEPERS

- Always install sleeper with upstand in the correct position
- A 25mm super elevation on curve will alleviate wear and tear on rolling stock wheels and rails.

### STEP 1

- Always use a carry handle when moving sleepers
- Use the tools for safe and easy installation of concrete sleepers
- Ensure that the pad is correctly placed on the rail seat to protect the sleeper against abrasion.
- Remove the mine clips.



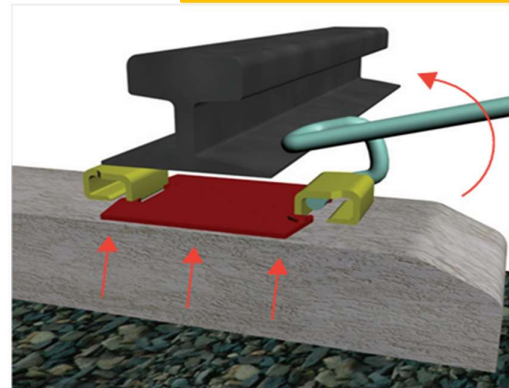


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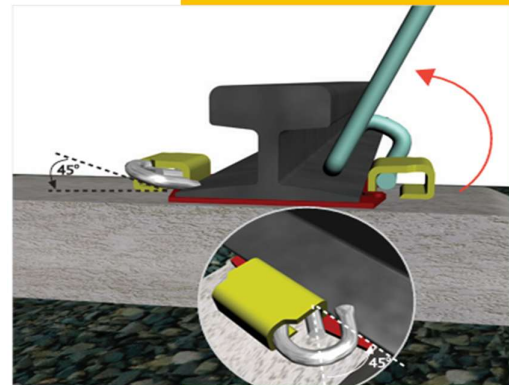
## STEP 2

- Insert Panlifter into the shoulder
- Lift the handle to clamp the sleeper to the rail.



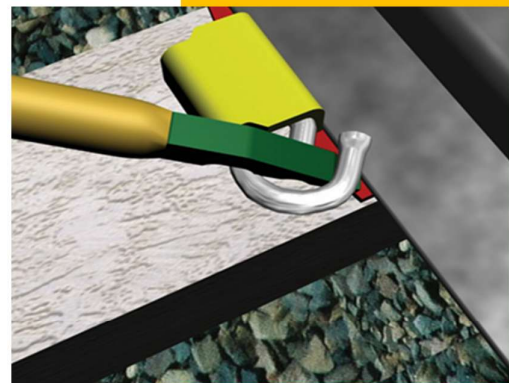
## STEP 3

- Push the rail down onto the rail seat with the Panlifter, while installing a mine clip on the opposite shoulder.
- Insert the heel of the mine clip into the shoulder at a 45° angle.



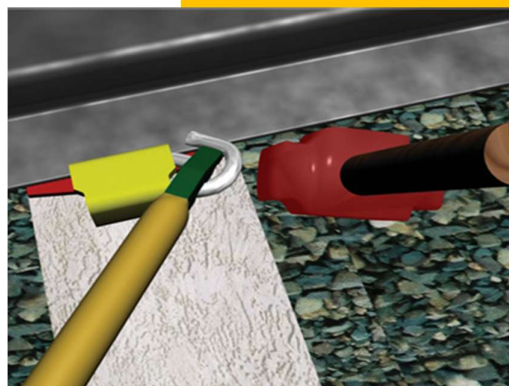
## STEP 4

- Position the installation tool around the outer arch of the mine clip
- The mine clip should remain at a 45° angle.



## STEP 5

- Insert the mine clip as shown
- Using a hammer tap the mine clip into position. A final blow to secure



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## STEP 6

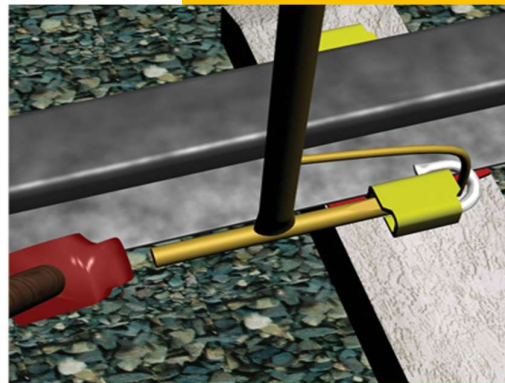
- The mine clip is correctly installed when the front of the clip protrudes just past the shoulder
- The installation tool facilitates safe and proper installation of the mine clip.



## EXTRACTION PROCEDURE FOR TRACK MAINTENANCE

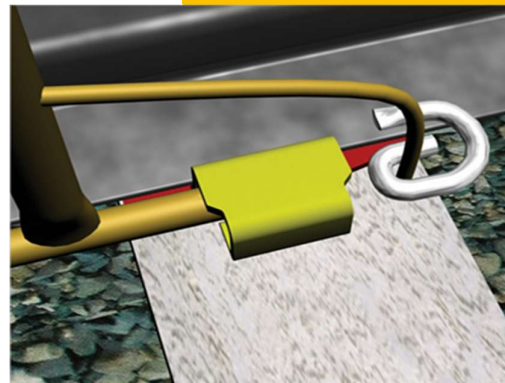
### STEP 1

- Use the handle of the installation tool as an extraction tool.
- Place the tapered side of the extraction tool against the mine clip inside the shoulder. Ensure that the clip catcher is in position on the opposite side
- Dislodge the mine clip by tapping the extraction tool at the opposite end.



### STEP 2

- The clip catcher will prevent the clip from flying out and eliminate the risk of injury.



## QUALITY ASSURANCE

Rainbow Mining Support (Pty) Ltd production and testing programs comply with all local (ISO 9001:2015) and international testing standards.

## CUSTOMER SERVICE

For additional support options available at your area, contact our local offices.  
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