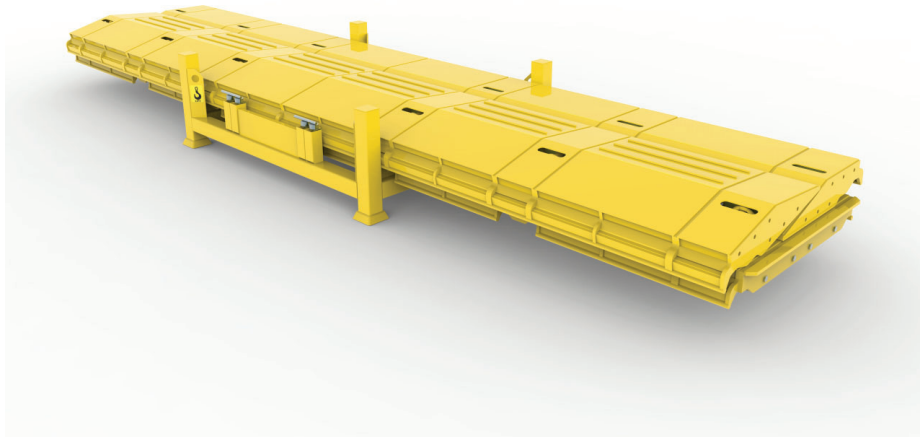


TRAXESS TXI7-OI

Specification



Modular Track Access System

Issue 3

July 2022

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Issue Record

First Issue	16th May 2017
Issue 2: Re-branded	11th March 2019
Issue 3: New works address	21st July 2022

Introduction



Traxess TX17-01 has been developed in response to a need for a super-heavy-duty Road Rail Access Platform (RRAP) which is quick to install, capable of coping with today's heavy RRV machines and which will also allow the passage of Engineering Trains without having to be removed from the track.

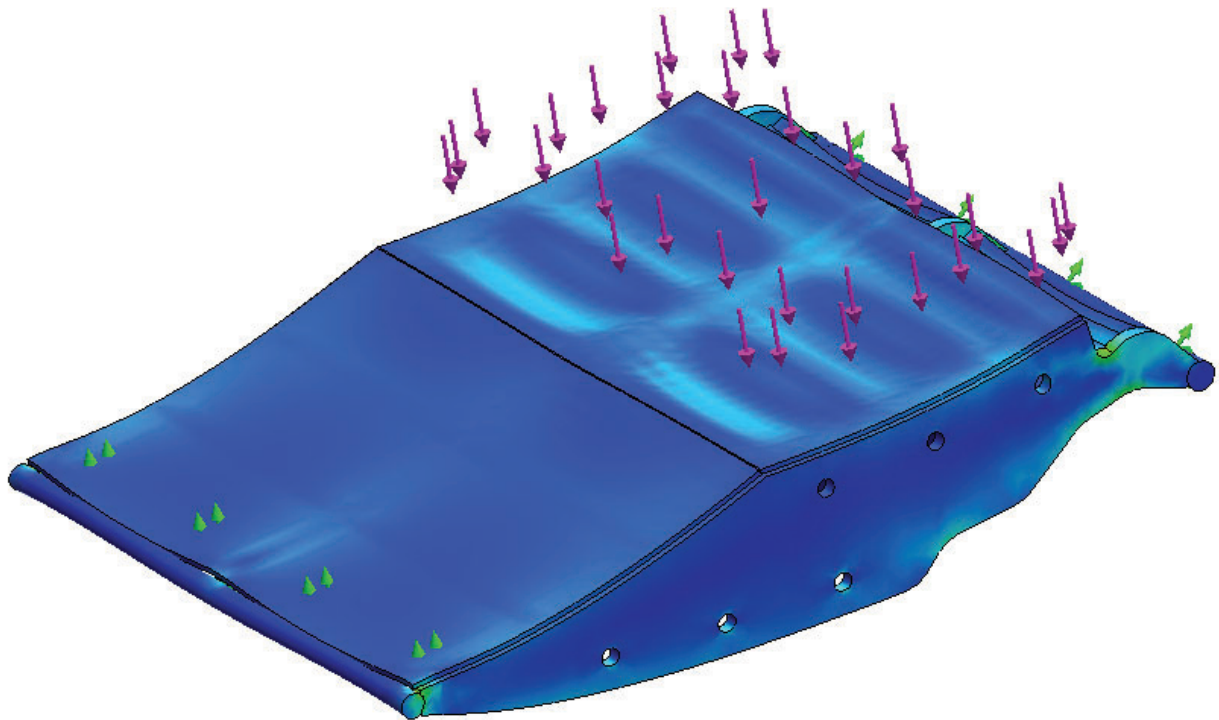
The result is a three piece RRAP system consisting of a central platform spanning the four-foot supported on either side by bars resting in the fillet of the rail foot and a pair of ramp sections which rest on the rail foot and which are clamped to the rail by twist-lock pegs passing under the rails.

Each of the three main sections is built up of 900mm and 300mm wide modules, bolted together to form 7.2m lengths.

This modular design has two significant advantages: firstly sections can be removed if required to form a shorter RRAP and secondly any damaged sections can be replaced very quickly.

Each of the modules is designed to carry a load of 15 tonnes making the RRAP suitable for use with machines up to 60 tonnes.

Installation of the TX17-01 Traxess is even simpler than the original Traxess system and will take around 12 minutes.



All elements of the system have been subjected to rigorous analysis to ensure a minimum safe load of 15 tonnes per module

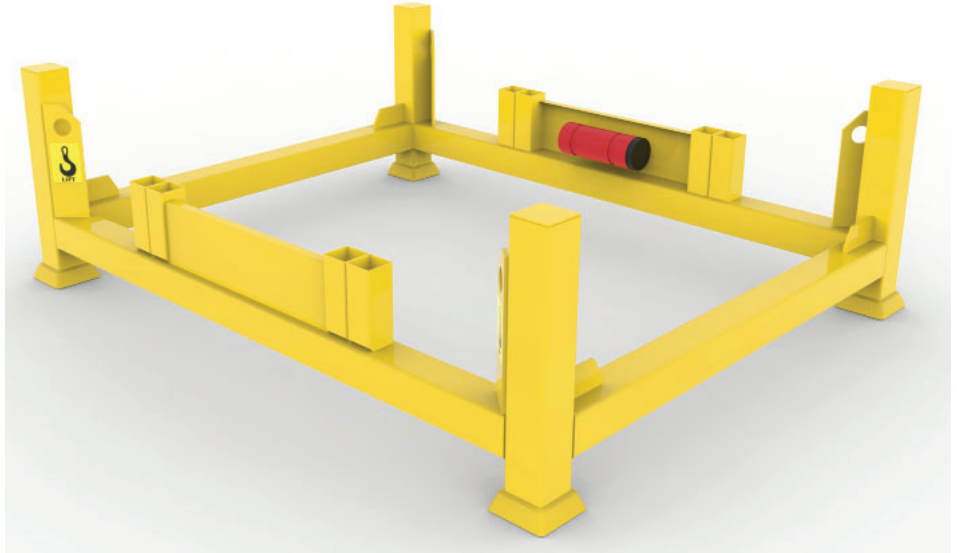
Specifications

Overall Length	7,340	mm
Height Above Rail Head (CEN60)	31	mm
Deck Width	2,610	mm
Four Foot Panel Width	1,320	mm
Approach Angle	20	degrees
Max Wheel Load	15,000	kg
Mass of Four-Foot Panel	2,860	kg
Mass of Ramp Panel	1,785	kg
Mass of Stillage	346	kg
Total Weight of System	6,800	kg

System Components

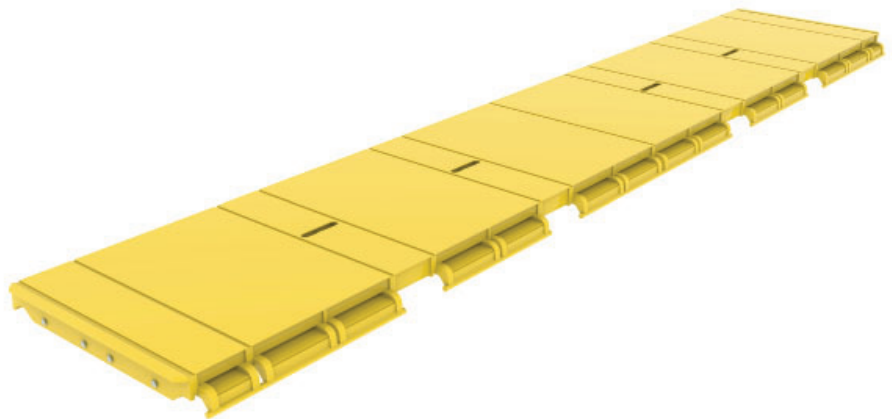
Stillage

A fabricated steel stillage with four integral lifting points and stowage for all parts and documentation



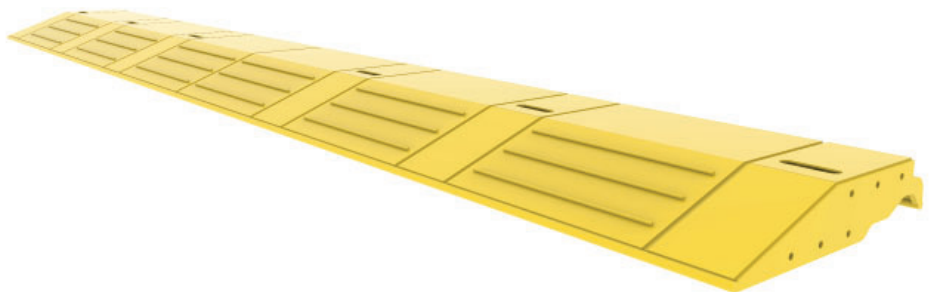
Four-Foot Panel

Comprising 900mm and 300mm wide modules with a chamfered lead-in plate bolted to each end.



Ramp Panel

Comprising 900mm and 300mm wide modules bolted together to form a 7.2m length.



General Construction

Each of the modules which make up the TX17-01 Traxess System is a fully welded all-steel fabrication using 20mm side plates, 12mm cross plates and a 6mm durbar pattern deck plate.

Each of the 300mm sections has a slotted top plate under which a master link is fitted for lifting purposes. The master links drop down below the deck plate when not required to prevent damage from caterpillar tracks.

All parts have been analysed for strength and are rated at 15,000kg per module.



Four Foot Panel 900mm Module

With 6mm durbar pattern floor plate deck and hinged foot at one side to facilitate insertion in track



Fully Ribbed Heavy-Duty Construction

The all-welded steel fabrication of the panels ensures they can withstand the heaviest machines whilst the full width bars resting on the rail foot minimise the stress applied to the running rails.

The shape of the panel allows the passage of rail vehicles unimpeded by the RRAP.

300mm Panels with Lifting Eyes

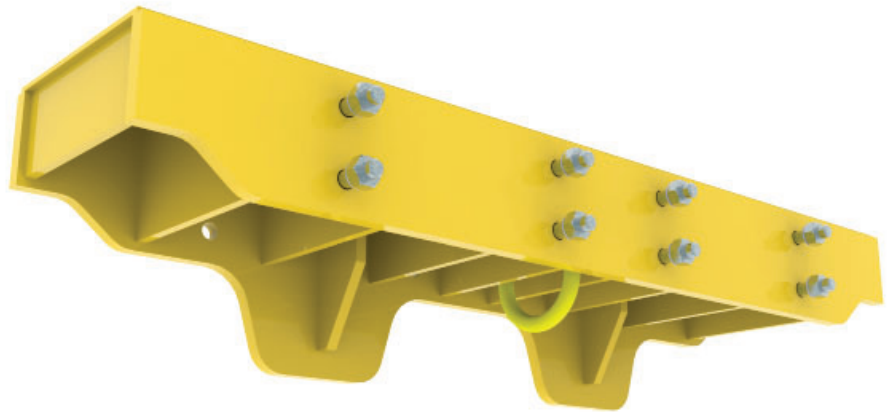
A master ring is fitted to the 300mm extension panels within the four-foot platform section to allow the panel to be lifted using a two-leg chain set.



Cleats Prevent Panel Movement

To stop the four-foot panel sliding along the rail, cleats in the 300mm sections engage with the crib ballast.

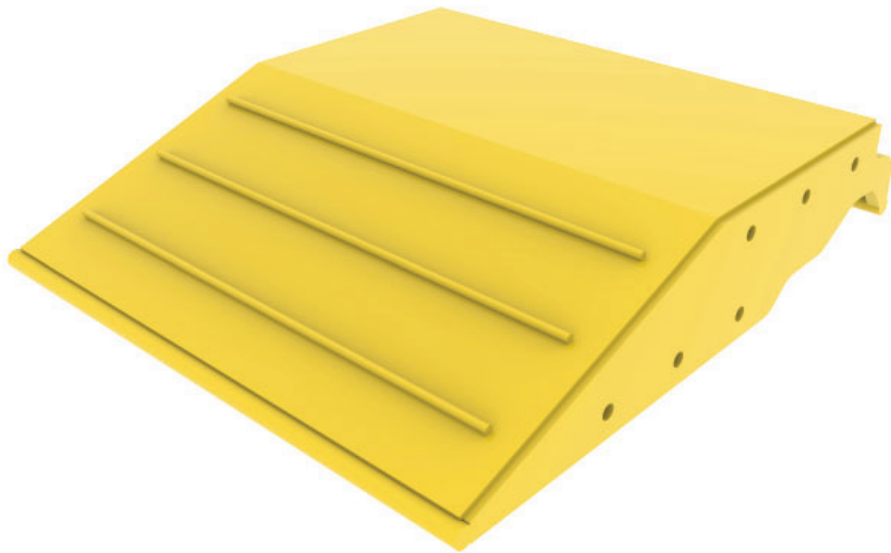
The position of the cleats in the assembly is compatible with sleeper spacings of 28, 30 and 32 per length.



300mm Ramp Sections with Lifting Eyes

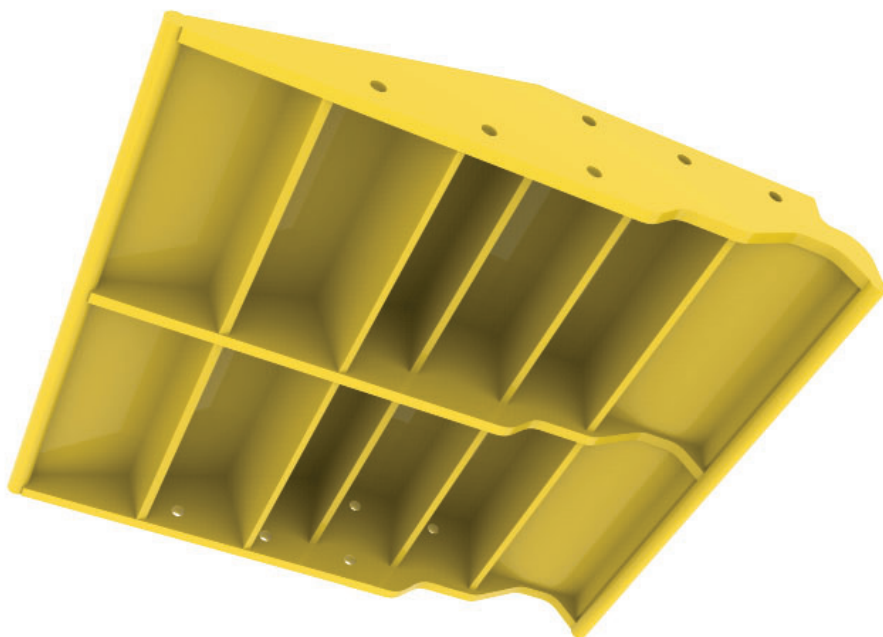
As with the four-foot panels, the 300mm ramp sections have master links which can be lifted out of the slots for handling the ramp panels with a two-leg chain set.





900mm Ramp Sections with Cleats

Round bar cleats welded to the ramp section help steel tracked machines to climb onto the platform.



Heavy-Duty Construction

Like the four-foot panel modules, the ramp sections are heavily ribbed and feature a 6mm durbar pattern deck plate.



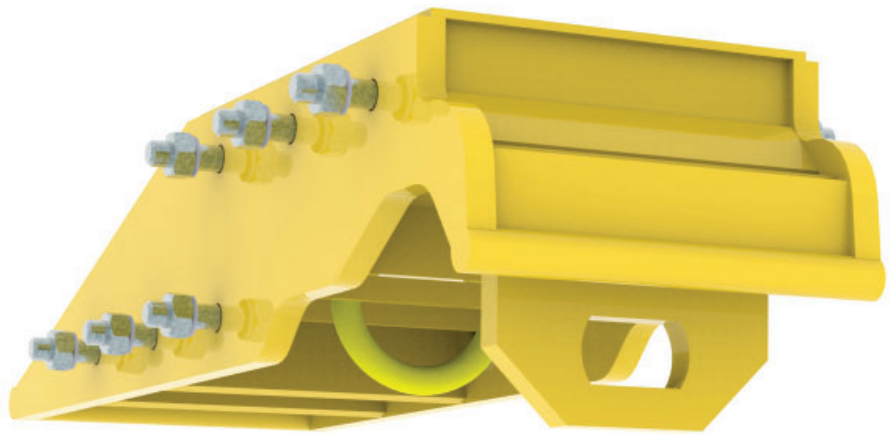
Twist Lock Pins for Ramps

The ramp assemblies are secured to the rails using twist lock pins passing under the rail foot.

A hook feature at the handle end fits over the rail foot on the four-foot side.

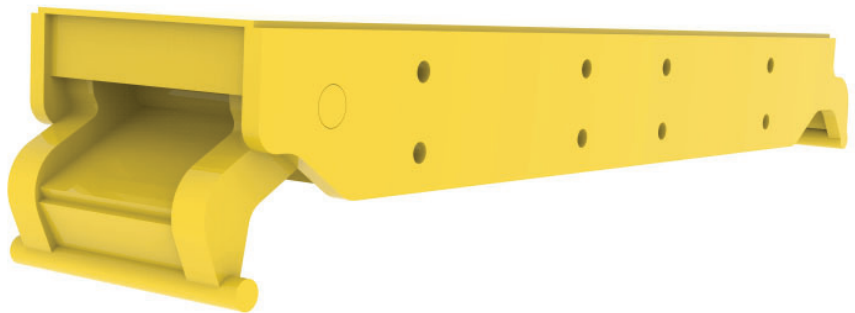
Twist Lock Engagement

The twist lock pins engage with slots in vertical plates built into the 300mm ramp extension modules.



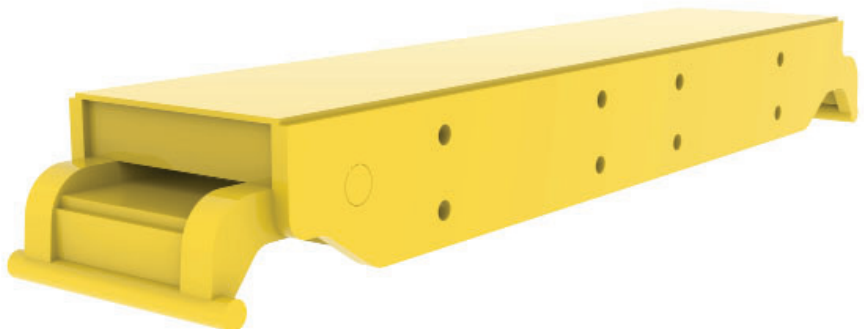
Hinged Foot

To allow the four-foot panel to drop between the rail heads the foot at one end of the modules hinges down to a pre-set stop.

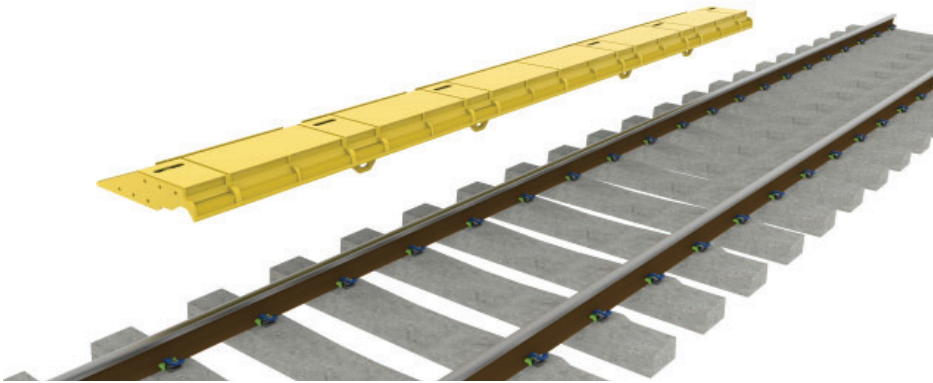


Hinged Foot

When in place in track the foot hinges up to hold the panel level.

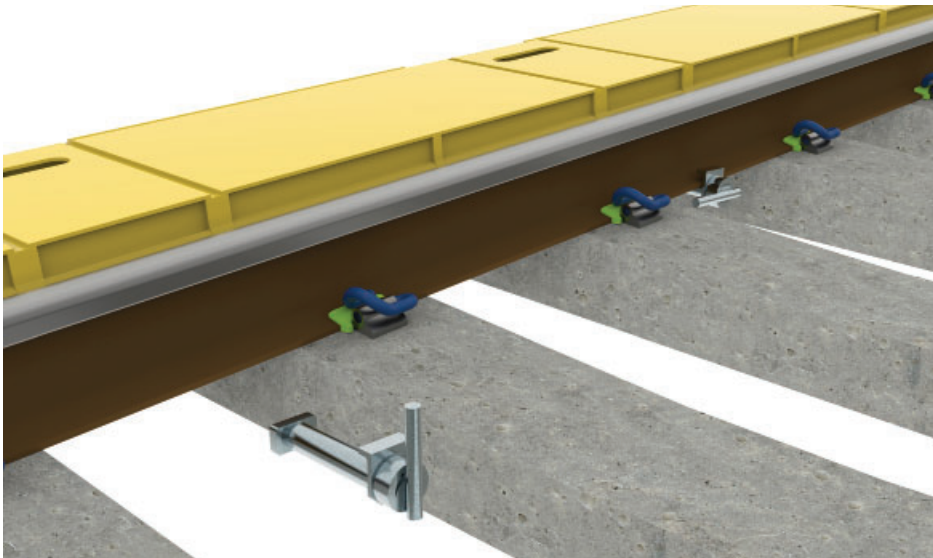


Installing in Track



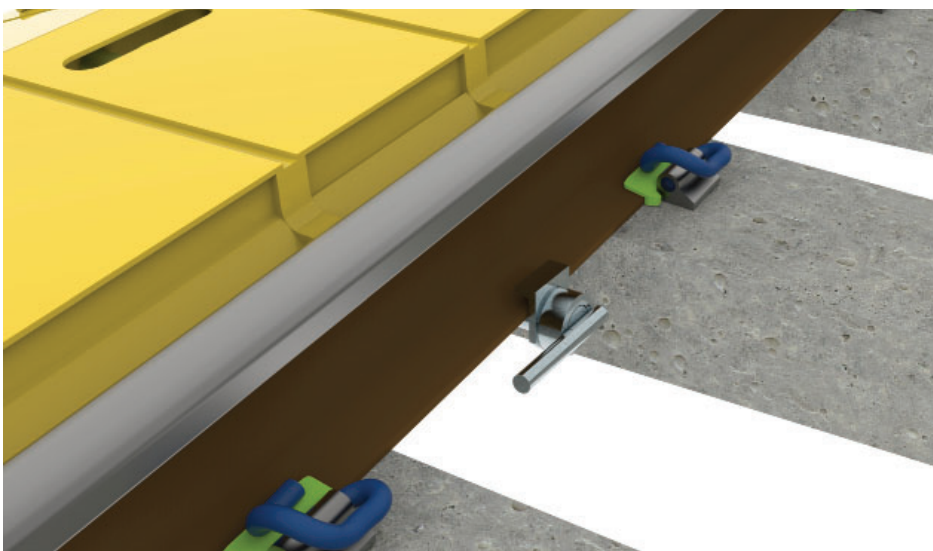
Stage 1: Ramp Panel

The first ramp panel is lifted into place.



Stage 2: Secure Ramp Panel

Pass the four twist lock pins beneath the rail foot to engage with the ramp panel

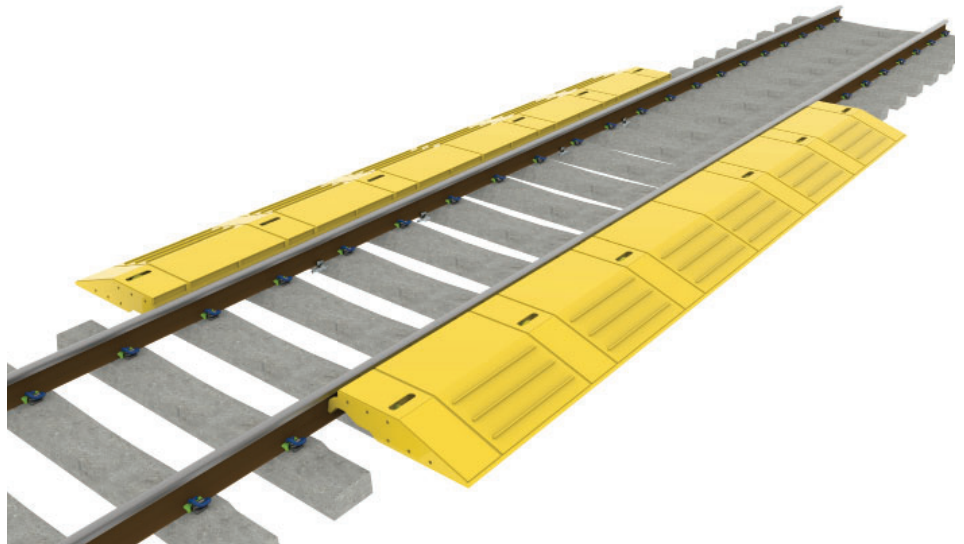


Stage 2a: Lock in Place

Rotating the handle of the twist lock pin to the horizontal position secures the ramp panel

Stage 3: Install Second Ramp

Lift the second ramp into place and secure with the remaining four twist lock pins.



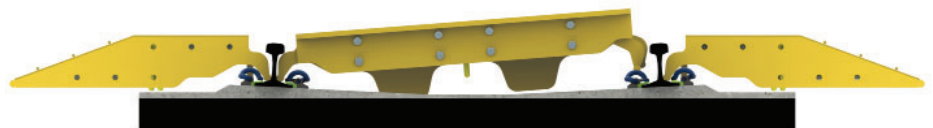
Stage 4: Install Four-Foot Panel

Lower the four-foot panel into place



Clearing the Rail Head

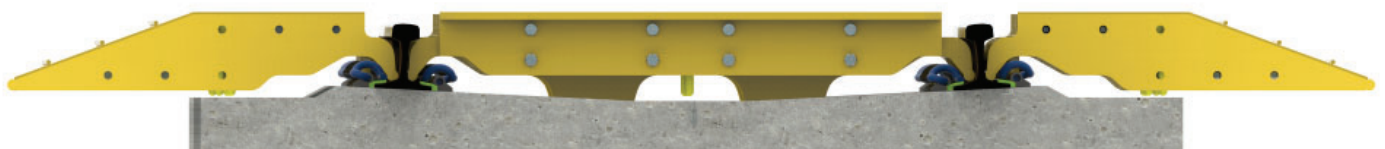
The hinged foot feature of the four-foot panel modules allows the panel to drop between the rails.



Final Installation

As the panel drops into place the foot rises and seats into the fillet of the rail foot.

Note the pins securing the ramp section and the cleats engaged with the crib ballast in this cut away view.



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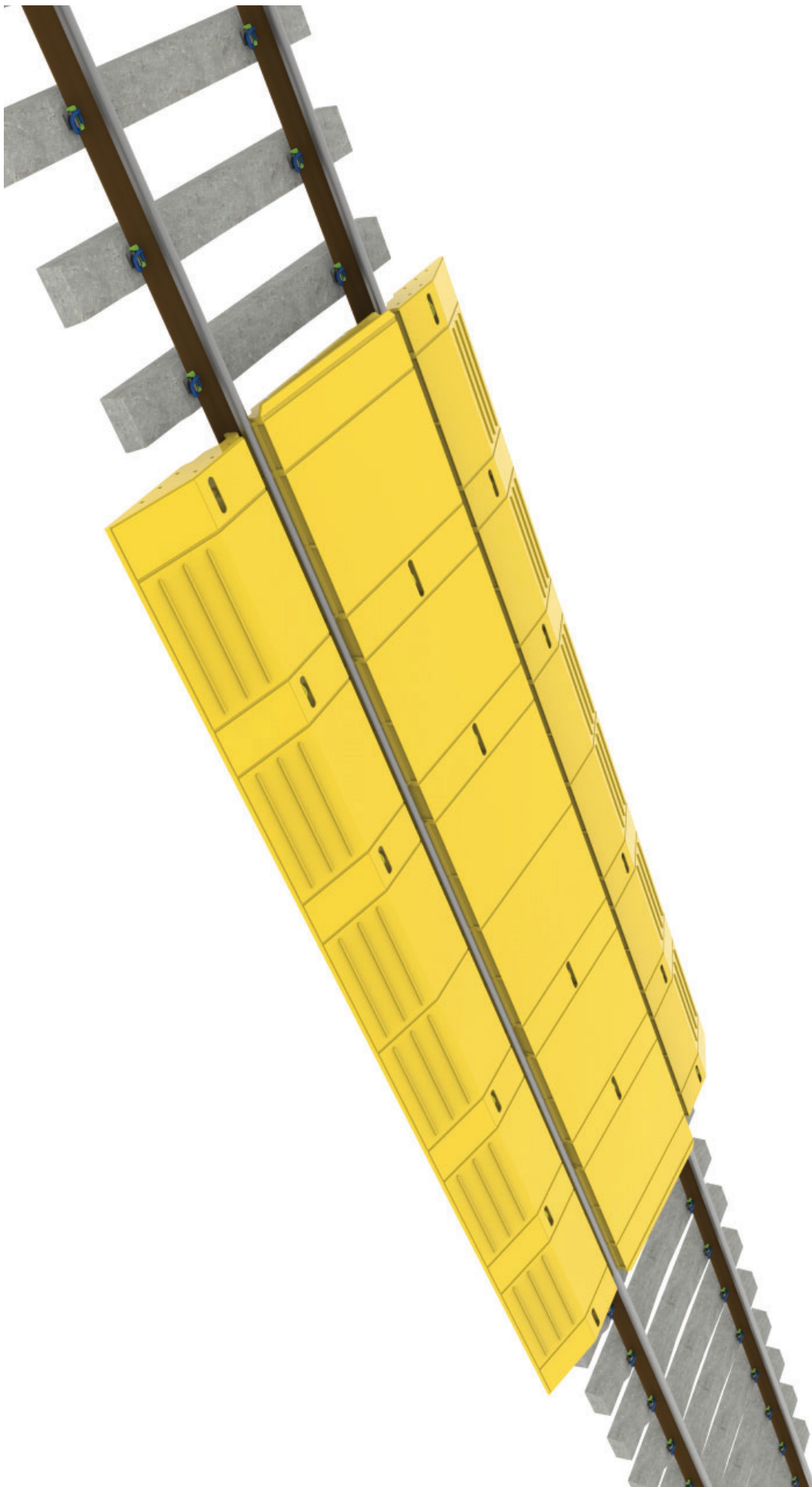
DETAIL A
SCALE 1 : 25

7200

7340



PROJECT		UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR - ± 1.0mm ANGULAR - ± 0.5deg		FINISH: COLOUR: SOURCE:		DEBR AND SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
Stock Size		NAME		ORGANISATION		DATE		TITLE		01	
Stock Length		DRAWN		D. Thomson		15/05/2017		TX17-01 IN USE			
Vendor		CHGD		Thomson ED Ltd							
Vendor No.		APVD									
Where Used		MFG									
Configuration		G.A.									
QTY REQD		1		Default				TX17-01-06		A3	
Client		4		5		6		7		8	
1		2		3		4		5		9	
A		B		C		D		E		F	
G											







Contact Details



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We strongly recommend contacting the factory to ensure that details given are still current.

More than half our business comes from special products designed and built as one-offs and we are always pleased to discuss amended specifications should the product detailed here not meet your exact requirements.

