

## Technical Data Sheet - TX Telescopic Platform System - Outdoor Specification



Please note: images used in this datasheet are primarily of indoor systems. These are for illustration of each feature only, and the retractable units shown may include some features not available with outdoor systems, including chairs and fascias.

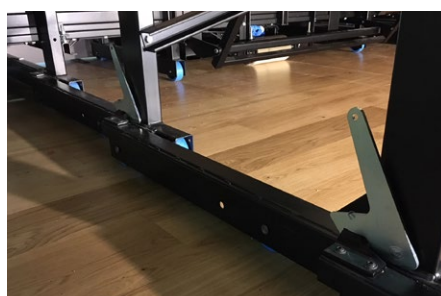
### Introduction

A high quality telescopic retractable platform system, TX is operationally durable enough for the largest arena installation but refined enough for education, arts and conference facility operators. Designed for low maintenance and a long life, TX delivers strong financial benefits to owners and operators. Our outdoor systems are fitted with our incredibly tough “Contour” benches - a double skinned, blow moulded HDPE bench with stainless steel frame.

### Structural Design Features

Each component, and the system as a whole, has been specified to be thicker and higher grade than the industry norm, and to meet or exceed industry standards, with high safety factors built in.

- Complies to BS EN 13200-5:2006, ICC 300, DIN, and other international standards.
- Designed to withstand both static and dynamic loads.
- Full structural calculations, compiled by an independent structural engineer are available on request.
- Ten year warranty on understructure.



Robust gravity operated row locking system to lock opened rows securely in place, even in seismic areas.



All-steel parallel guidance system ensures safe, reliable opening, greatly reducing wear and extending system life.



Designed to eliminate metal-to-metal contact to reduce wear, warping and noise.



Bolted construction is continuously adjustable throughout system life to keep system running smoothly and reduce risk of wear and / or jamming.

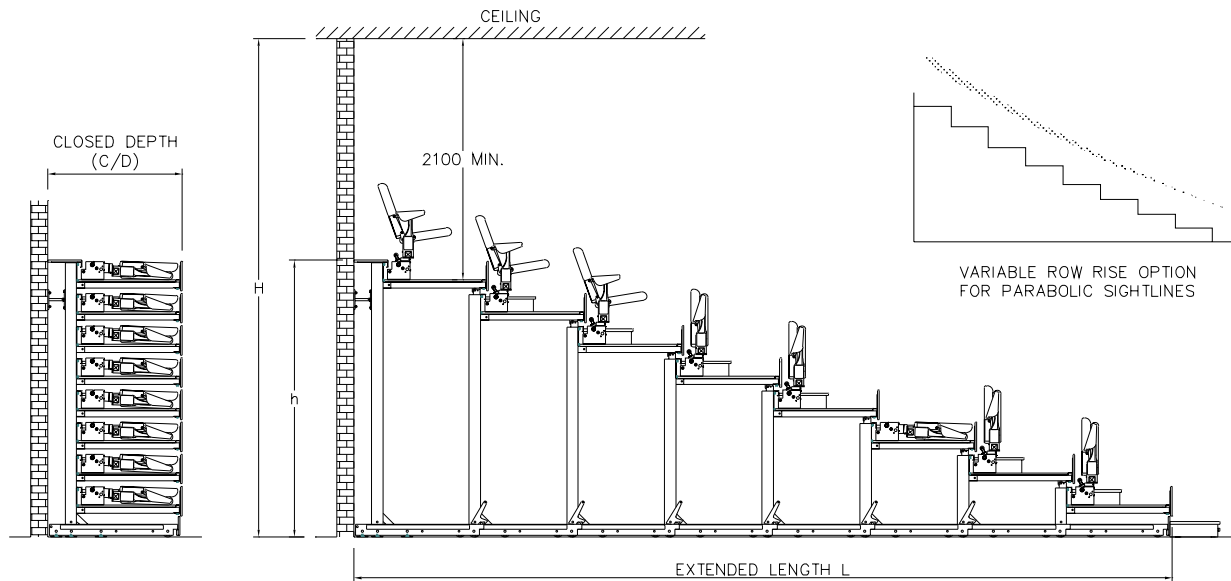


Diagonal bracing members manufactured from strong steel channel with secondary bracing for very large systems.



Non-slip aluminium deckboards

## Dimensions



$$\text{Minimum room height (H)} = (\text{number of rows} \times \text{row rise}) + 2100\text{mm}$$

$$\text{Unit height (h)} = (\text{number of rows} \times \text{row rise}) + 170\text{mm}$$

## Row depths / closed depths

720mm, 840mm, 960mm

Other depths available in special circumstances.

Closed depth (C/D) = Row depth + 325mm

## Row rises

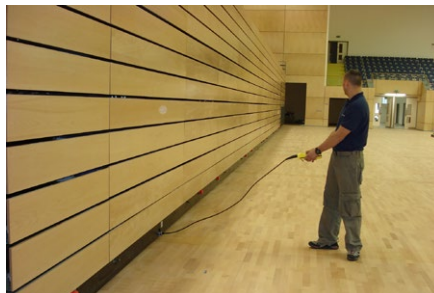
**Bench systems** 260, 280, 300mm

**Chair systems** 260, 280, 300, 320, 340, 360, 380mm

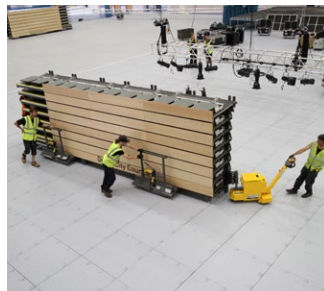
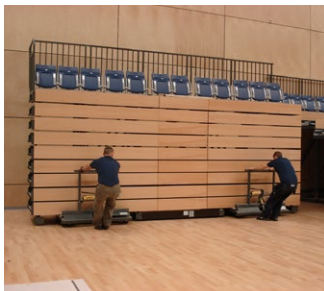
## Storage Options



**Type F** - Floor and wall fixed. Stays in place once closed.



**Type V** - Travelling unit which allows movement as a complete bank, forwards and backwards, from its stored position.



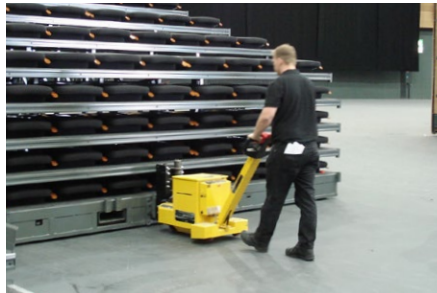
**Type M** - Mobile. Once closed, units can be specified to be moved via (pictured left to right): a pair of hydraulic trucks, hydraulic trucks with an additional power truck to assist, or fork lift truck.



## Platform Opening and Closing Options



Manual operation via removable pull handles.



Power truck operation.

## Special Configurations



**TXD Double Row Depth System** - A system with two rows of chairs per platform, ideal for spaces with restricted height.



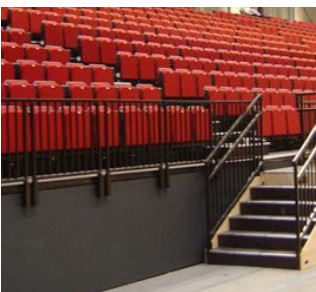
**Low Row Rise System** - An alternative option where height is restricted. Seats have to be completely removed before retraction.



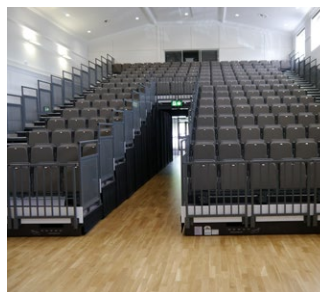
**Partial Opening System** - A mechanical locking system allowing the platforms to be safely opened to a specified number of rows, starting at the front.



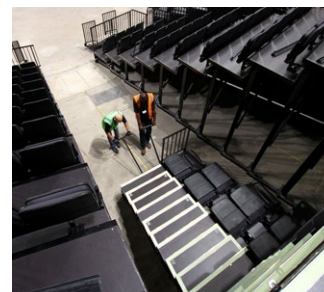
**Truncation** - Allows the platforms to be safely opened to a specified number of rows, starting at the back. Posts are provided to safely support the open platforms.



**Permanent Truncation** - front row permanently raised to improve sightlines, or to allow for additional seating in front.



**Vomitory opening.**



**Tapered units** - to help create curves and bowl shapes.

## Deck Trims



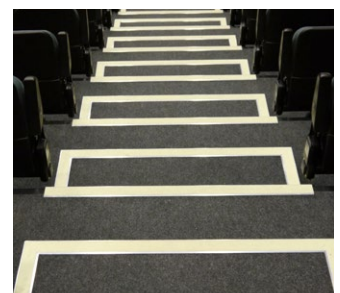
Row letters on step riser.



**Standard Deck and Step Nosing** - Aluminium profile. Shown with row letters on step tread.



**Custom Nosing** - With infill of your choice.



**Photoluminescent Nosing.**

## Rail Operation



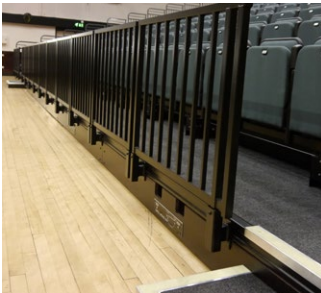
**Removable Side Rails** - Removed before platforms are retracted and usually stored on a trolley.\*



**Self-storing Side Rails** - Angled to nest together when unit is retracted.



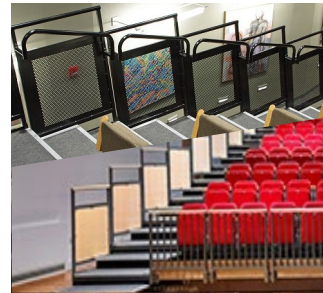
**Kick plates** - To guard the operational clearance where an aisle is adjacent to a wall.



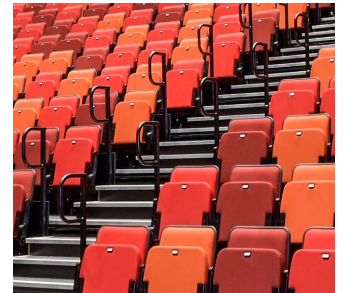
**Front Rails.**



**Rear Rails (seen from behind)**



**Hand rails** - Top: US ICC compliant hand rails. Bottom - Wooden rail tops.



**Aisle Grabrails.**

## Rail Design



**Type D** - Tubular steel infill.



**Type E** - Perforated steel infill.

## Other Items



**Trolleys** - for rails and any other ancillary items.



**Deck infills** - hinged steel, or removable rubber to create joint between two adjacent mobile units.

\*Where removable rails are included, the telescopic system will include anchor points to facilitate the use of a standard restraint belt. This will ensure that system operators comply with the Working at Height Regulations 2005 when installing or removing rails.



## Material Specification

### Finishes

<b>General steelwork</b>	Two coat dual process using BPP600 barrier primer plus Interpon D1036 top coat, complete with an iron phosphate pre-treat. Epoxy polyester powder finish, matt black RAL 9005.
<b>Front beam</b>	Pre-galvanised standard or epoxy powder coating, colour RAL 9005 matt black, as option.
<b>Rear beam</b>	Pre-galvanised standard or epoxy powder coating, colour RAL 9005 matt black, as option.

### Specification

<b>Bench</b>	Double skinned, blow moulded high density polyethylene bench with stainless steel frame
<b>Column</b>	Rows 1-10: 100 x 50 x 3mm, R.H.S (BS EN 10219-1). Rows 11-17: 100 x 50 x 3mm, R.H.S. + 50 x 50 x 3mm S.H.S. (BS EN 10219-1). Rows 18 & above: 100 x 50 x 3mm, R.H.S + 100 x 50 x 3mm R.H.S. (BS EN 10210).
<b>Column foot</b>	Pressed steel, 3mm thick (BS EN 10025).
<b>Wheels</b>	100mm x 40mm wide, with polyurethane tread, c/w needle bearing (4 wheels per column).
<b>Braces</b>	Rows 2-13: 50 x 45 x 2.5mm roll formed 'C' section (2.5mm mild steel to BS EN 10025). Rows 14 & above: 50 x 50 x 3mm S.H.S. (BS EN 10219-1).
<b>Front beam</b>	76 x 74 x t2.3mm roll formed section (Zinc plated mild steel; EN 10147).
<b>Rear beam</b>	175 x 50 t2.3mm roll formed section (Zinc plated mild steel; EN 10147).
<b>Deck boards</b>	Aluminium plank with non-slip ridged surface.
<b>Rails</b>	Outer framework of rail: ERW 1¼" x 1¼", 14 SWG. Vertical bars - ¾" x ¾" x 16 SWG SQ tube. Horizontal Bars - 1½" x ¾" x 16 SWG REC tube. All round tube (type E only) is ERW 38mm x 2mm. Steel Grade: BS6323 part 5: 1982 ERW1.  Perforated steel sheet is to BSEN10130:1999 DC01.
<b>Vertical load</b>	4kN/m <sup>2</sup> (5kN/m <sup>2</sup> where applicable).
<b>Horizontal load</b>	7.5% of vertical load.
<b>Rail load</b>	All rails comply with BS13200 Part 3: 2005 and Part 5: 2006
<b>Row locks</b>	Heavy duty, 5mm steel, foot level, automatic latch locks. Gravity operation. Heavy duty, 5mm steel, vertical interlock at all column tops.
<b>Platform levels</b>	Cantilever slide arms are fully adjustable and transfer load onto 35mm dia. nylon rollers. Platform loads are transferred through moulded nylon transfer pads. Loads are transferred at 2 column positions and minimum 4 row support positions.

### Standards

<b>Strength and stability</b>	The TX system can be supplied to comply with most worldwide standards. TX is also approved for use in areas with potential seismic activity.
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### Notes

Surface construction and surface finish play an important role and greatly affect the operation of telescopic seating. A smooth, hard, level surface is an essential element, e.g. smooth concrete is an ideal surface. Our surface tolerance is ±2mm over 2m<sup>2</sup> (SR2 finish). Please ask us for more details and point load information.

**All information given above is for standard product. Please ask us about customisation.**

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