

PROBE

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PROBE-KINETIC

kinetic INSTALLATION MANUAL

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Introduction

The new Kinetic Mobile system builds on the success of the previous system. Combining its outstanding features with new concepts and technology providing improved aesthetics and installation time while reducing maintenance.

The tried and trusted running track and joining system is now supported on screw adjusters that provide quick and accurate levelling both along, and equally important, across the track. This ensures a flat plane for the mobile units to run on.

The new track lengths of 1500mm and 2000mm not only ensure ease of shipping but, used in size combinations, reduce the waste on track length cuts and have pre-punched jack positions to receive jack inserts at the cut ends.

The Mobile carriages themselves offer no obvious difference however the slightly larger running wheels give an improved drive gear ratio. The new chain adjustment system contained within the front carriages eliminates the need for the old chain adjuster whilst maintaining the ability to re-adjust as and when necessary.

A complete new range of decor end panels offer individual styling. The new LED hand wheel illuminates on operation.

This document gives the recommended installation procedure and it, together with the product digest, should cover all eventualities. Should you have any queries relating to our products or the installation procedures in any way please contact our sales office:

Tel: 0161 368 4286

Email: sales@lionsteel.co.uk

Please read these instructions before use and keep for future reference

! Caution

- This item contains small parts that have sharp points and edges in the unassembled state.
- Keep away from children.
- Always place mobile shelving on a firm level base See section "installation Location".
- Visually inspect all tools.

Before assembly:

- Attend induction meeting where appropriate. Should there be no formal induction offered then familiarise yourself with key contacts and emergency procedures including escape routes and first aid.
- Please read all instructions before beginning assembly.
- Adopt the appropriate procedure and warning signs for unloading and carting top site.
- Unpack and assemble this furniture, on a protective surface, in the room it will be used.
- Check that all components ordered are included.
- Save all packing materials until assembly is complete to avoid accidentally discarding smaller parts or hardware.

After assembly:

- Always secure static units to track using the bolts supplied.
- Dispose of all packaging materials safely.
- Always secure anti tip brackets to carriages. See "Static section"
- Always check to ensure that carriages travel safely without being impeded.
- Ensure that an operating instruction manual remains with shelving unit/customer after handover demonstration.

Equipment Needed:

- Battery Operated Screw driver/sockets (various).
- Rubber assembly mallet.
- Laser Level.
- Spirit level.
- Spanner and Allen keys (various).

! Safety Equipment

Suitable hand protection should be worn during assembly.

Suitable steel toe cap boots with mid- sole protection should be worn during assembly.

Eye protection should be worn when using the drill and mallet.

Use manual handling aids when lifting, pulling or pushing components.

Use suitable access equipment as required.

! Warning

Assembly should be undertaken by at least two competent people.

Ensure operating instructions are retained and that users are aware of the safe operating procedure.

Ensure that the floor is strong enough for maximum loading capacities. See section 1.04.

Never drill into surfaces suspected of containing utilities.

Never climb the structure or stand on shelves.

Do not use shelving as support for access equipment.

Ensure that maximum loading capacities are not exceeded.

Do not track carriages when people are stood between. If in doubt ASK.

Training

1.03 Training

Training, will be carried out at our Hyde factory. Please contact:-

sales@lionsteel.co.uk

LION STEEL EQUIPMENT LIMITED

Johnson Brook Road,

Hyde,

Cheshire

SK14 4RB

t: +44 (0)161 368 4286

f: +44 (0)161 367 8214

1.03.1 Technical support

- For all technical support or enquires please contact:

sales@lionsteel.co.uk

1.04 Installation Location

Mobile shelving systems are specifically designed to take full advantage of the space available and achieve the maximum possible concentration of items to be stored. This always results in higher floor loading than would normally be found with static shelving where the concentration of loading is broken up by walkways.

This concentration of loading can manifest itself in structural floor problems but is more than likely to be in the form of deflection, creating gradients causing the units, at best, to run in one direction easier than the other and, at worse, run on their own; a dangerous situation for the users.

It's for this reason that mobile shelving systems are, in general, located on reasonably level, solid floors, much of the time, with firm foundations but can be anywhere within the building including suspended, computer and raised floors.

Prior to ordering and/or installation a survey should be carried out to determine the suitability, type and strength of the floor that will support the system. Should you at any time feel that the location is suspect then report back to your controller immediately?

Special instruction will be given when installations are on unusual floor types or finishes but some of the obvious issues can be:-

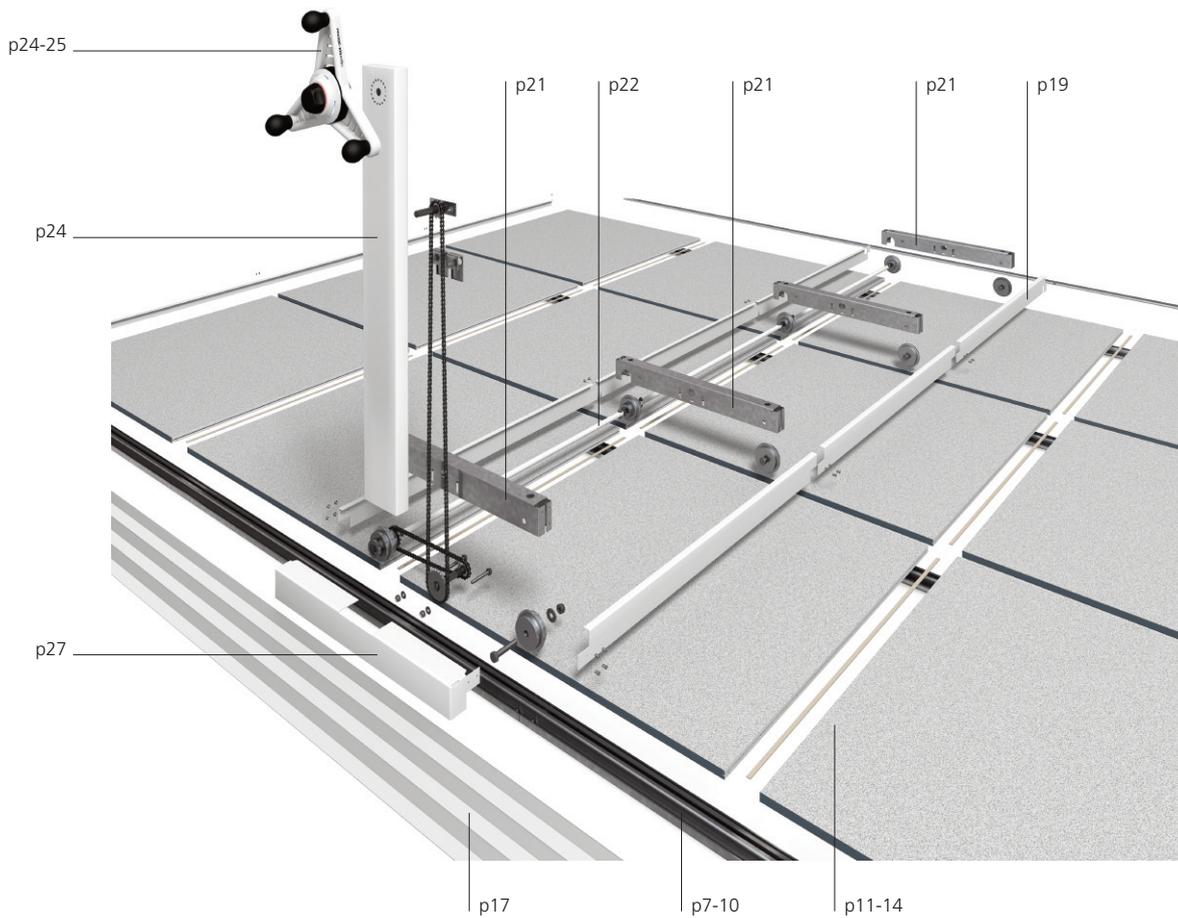
- Severe gradients or steps in floor.
- Expansion joints.
- Timber or mezzanine floors. These often feel bouncy.
- Soft and deep floor coverings. Old and firm carpets are generally not a problem.
- Asphalt floor coverings. Sometimes difficult to detect as can be an asphalt aggregate mix or Parkay tiles on a deep asphalt bed.
- Floor ducts, trunking and inspection hatches.
- Manholes or soft structure often to be found at the manhole edges.
- Overhead and wall obstructions.
- Impact on escape routes, sprinkler systems and emergency exits.
- Dampness or evidence of flooding.

If in doubt ASK!

Operating temperature range

The Kinetic mobile shelving system can operate within the temperature range -10°C to +40°C.

2.01 Product Description

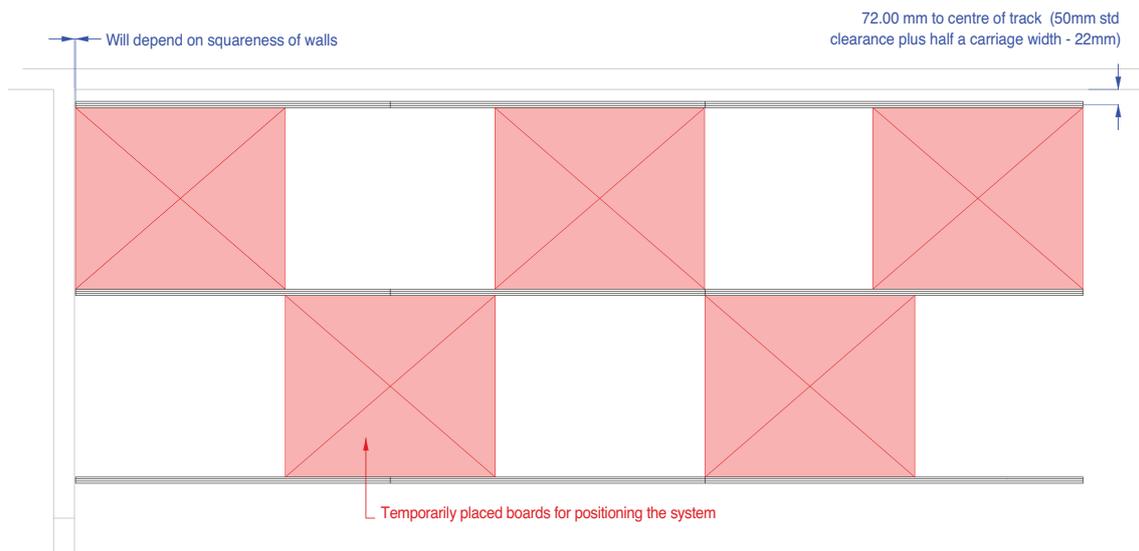


2.02 Product Digest

This document is to be read in conjunction with the Kinetic Product Digest that gives details of all components, assemblies and sub-assemblies together with modular sizes.

3.01 Setting Out

Setting out is made easy by using the boards in a random fashion locking into the track to square the system up.



Firstly check and find the furthest obstruction from the setting out point. This is usually a wall, or can be a line of columns, or even a given start line.

It is advisable to set the system out at least 50mm from any obstruction. This not only allows for any variation in the vertical but also gives enough clearance for hand access to the rear of the unit. Check for overhead issues.

It's normal practice to set out a master track and then temporarily place boards randomly to space the next track and square the system. All Initial track can then be added in the same way to position the system within the room.

At this stage, using a laser level, find the highest point of the tracks. All jacking/shimming points will be raised to this level (see page 10).

Care must be taken not to obstruct windows, doors and escape routes.

The drawing shows a typical drop in board pattern for setting out.

3.02 Track and Floor installed

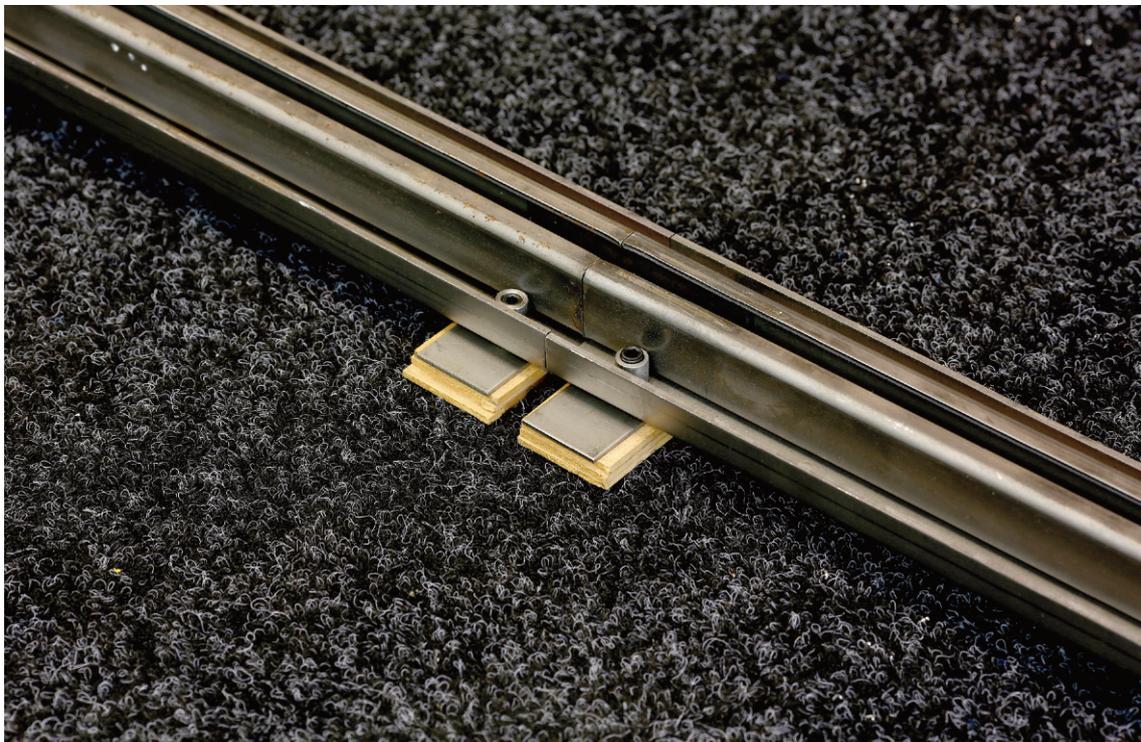
Once the system has been laid out then the temporarily placed boards can be removed.



- Lift tracks and position jack support plates.
- Using grub screws, level the track to the already established highest point.
- Insert track joiner and tighten grub screw into dimple in the inner track.
- Attach next track and tighten grub screw.
- Level end of this track and screw down grub screws on to jacking plate.
- Continue along the length of the track.
- Each jacking plate can be raised by inserting a non compressible material between it and the floor should the need arise.



- The above track joiner is placed into the two tracks and the screws are then tightened, they need to be tightened so that they bite into the track below.

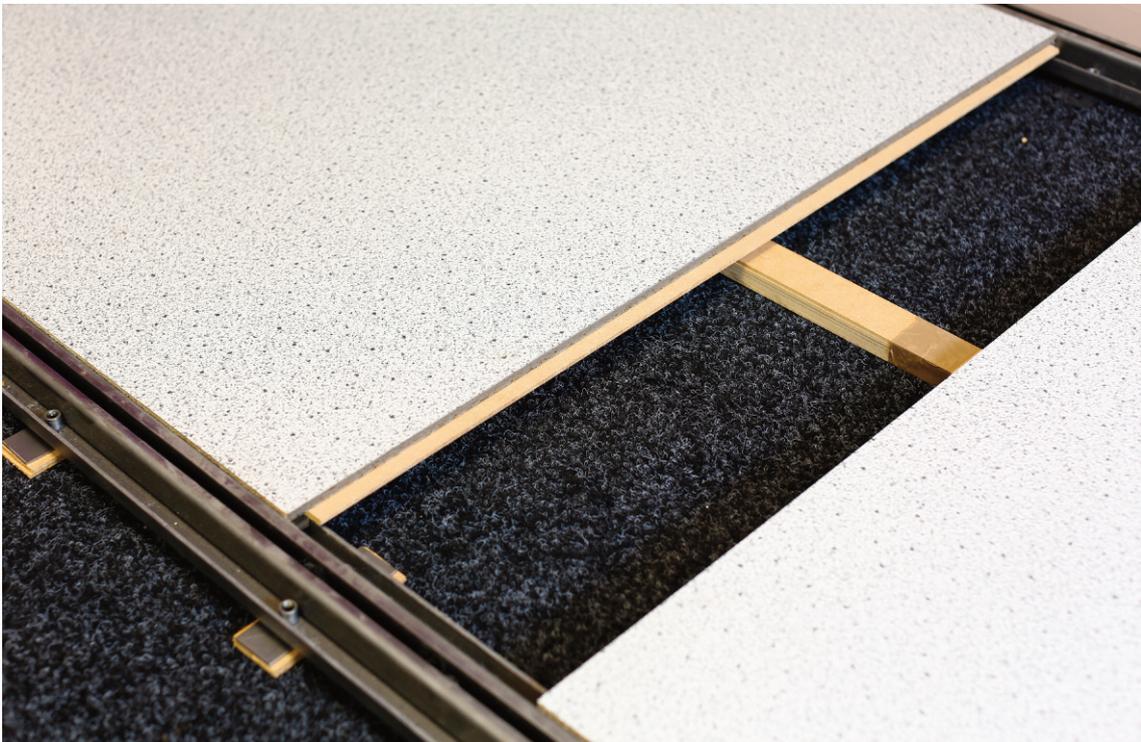




- Position other tracks and level as before.
- Drop in board.



- Tape hard board packing and slide into place.
- Tec-screw floor cover angle to hold board into position.
- Insert tongue into board and slide next board into position.



- Drop next board into position and tap into place with rubber hammer. Protect edge of board if necessary.

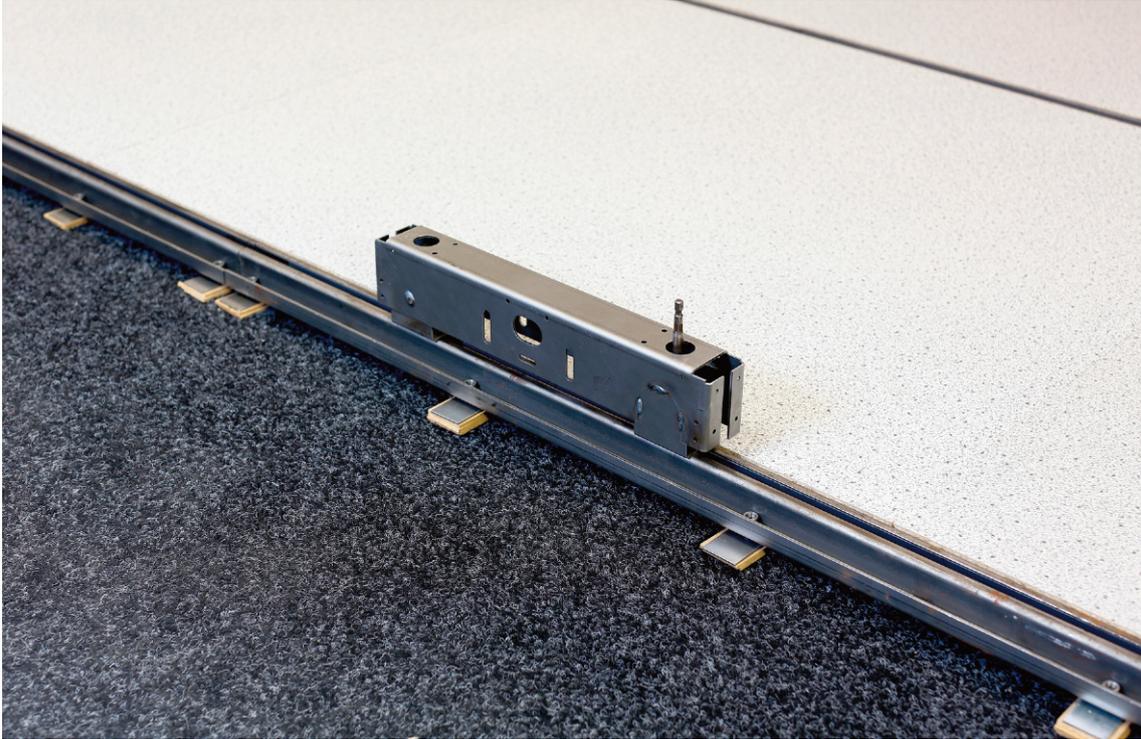


- Continue to end of track leaving cut section.

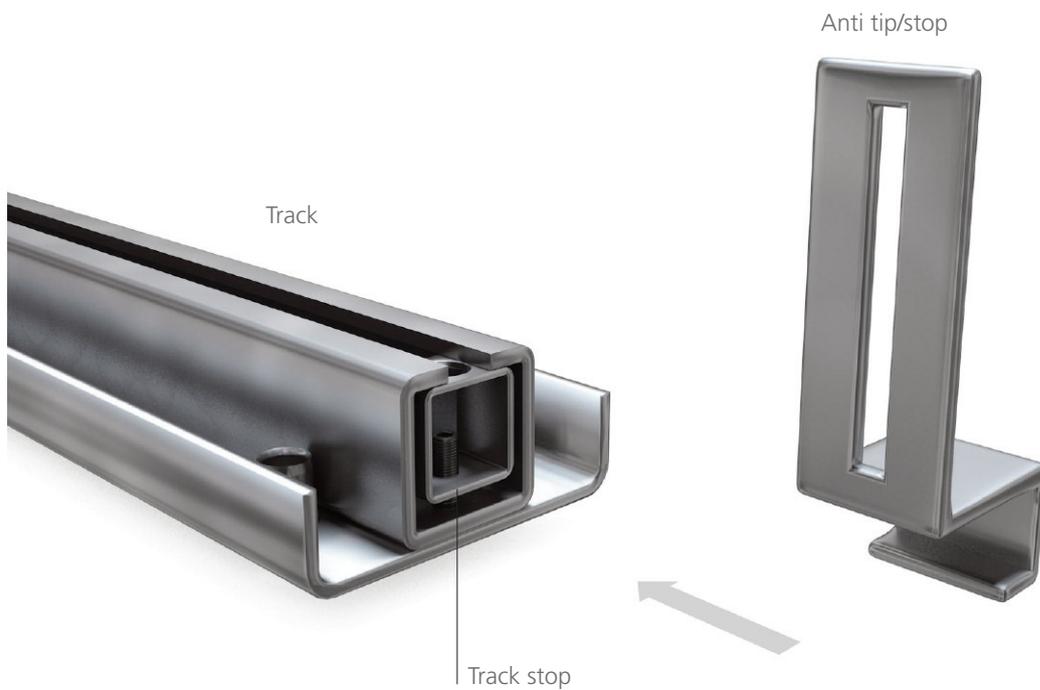




- At this point any static carriages need to be fitted using M8 x 16mm flanged nuts and bolts and slid roughly in place.



- Also at this point any stop assemblies within the track need to be slid loosely into position. Direction of travel is important.



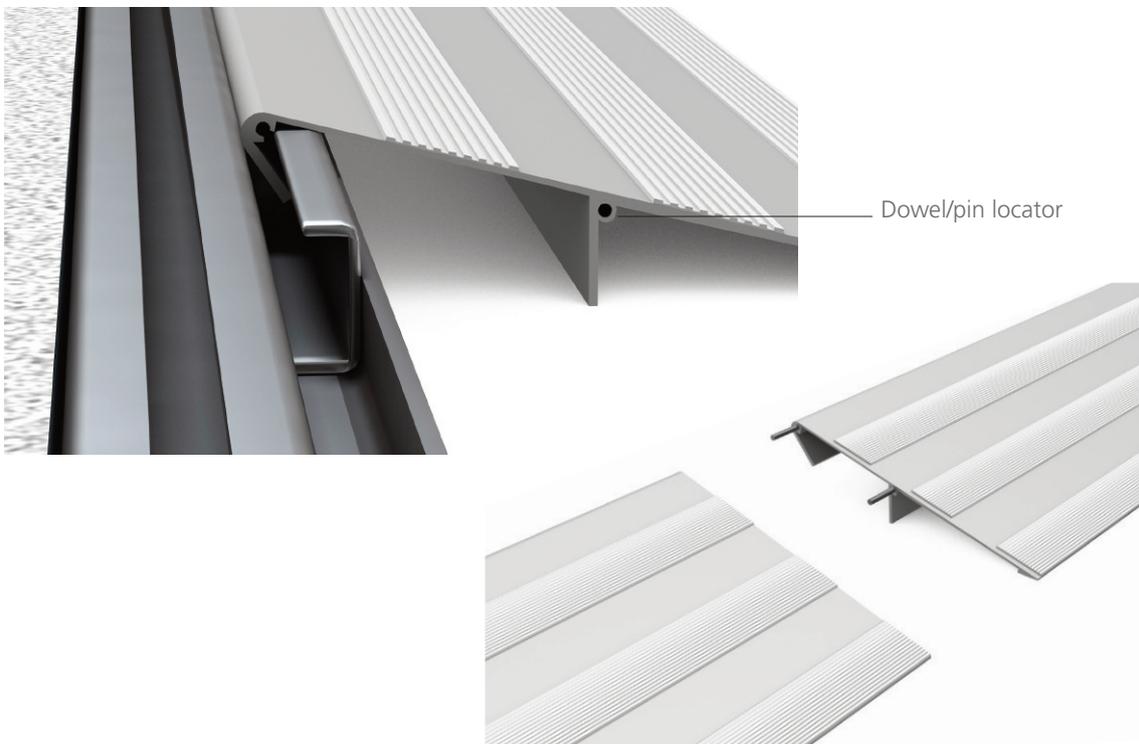


- The end of each run of boards is covered with a floor cover angle which is secured into position through the tracks holding the run of boards.





- Drop the first section of ramp into position with spacer provided and join with dowels. Tap pin locator on the ramp on one side to stop the dowels sliding to far in.





- Fit ramp end cover to ramp using self-tapping screw.

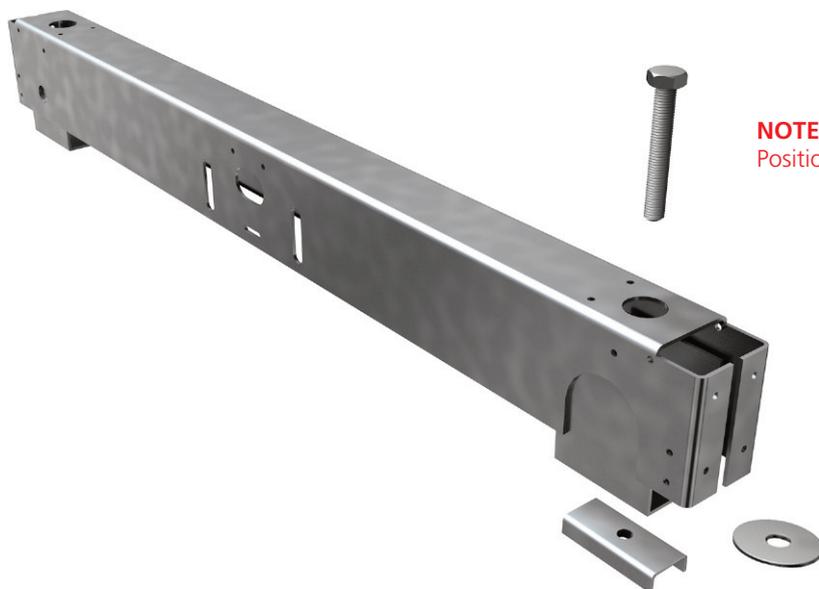
3.03 Static Assembly

- Slide Static carriages into position and fit facing channels and fillet pieces with self-tapping screws.

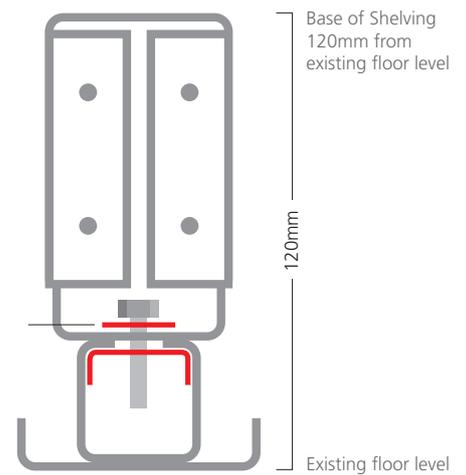


KINETIC MOBILE SHELVING SYSTEM

- The statics also act as stops for the mobile so although the statics can be tightened down to the track, at this point it's best left until the static carriage can be positioned by the adjacent mobile, so as to ensure perfect alignment. Access to the fixing bolt is through a hole in the top of the static. Socket is required.



NOTE:
Position of washer



3.04 Mobile Assembly

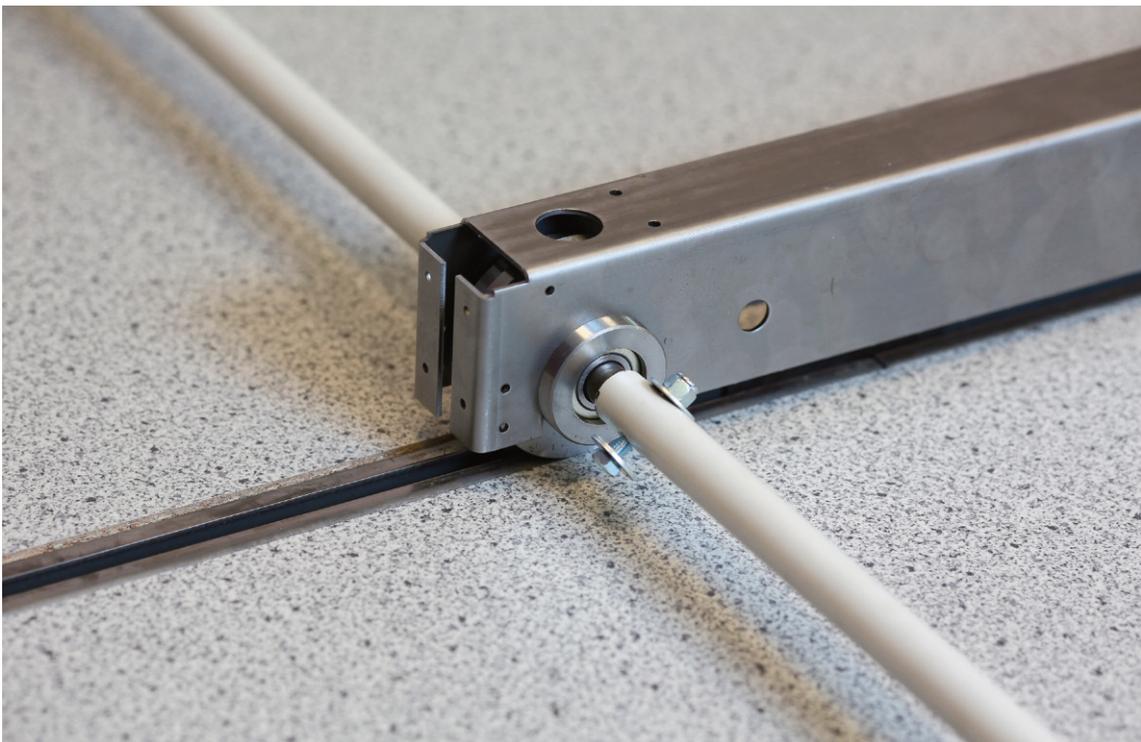
- Drop carriages of the first base unit into place. The front carriage has the drive chain. The middle carriages have wheel shafts protruding either side and the rear carriage has the wheel shaft protruding one side only.



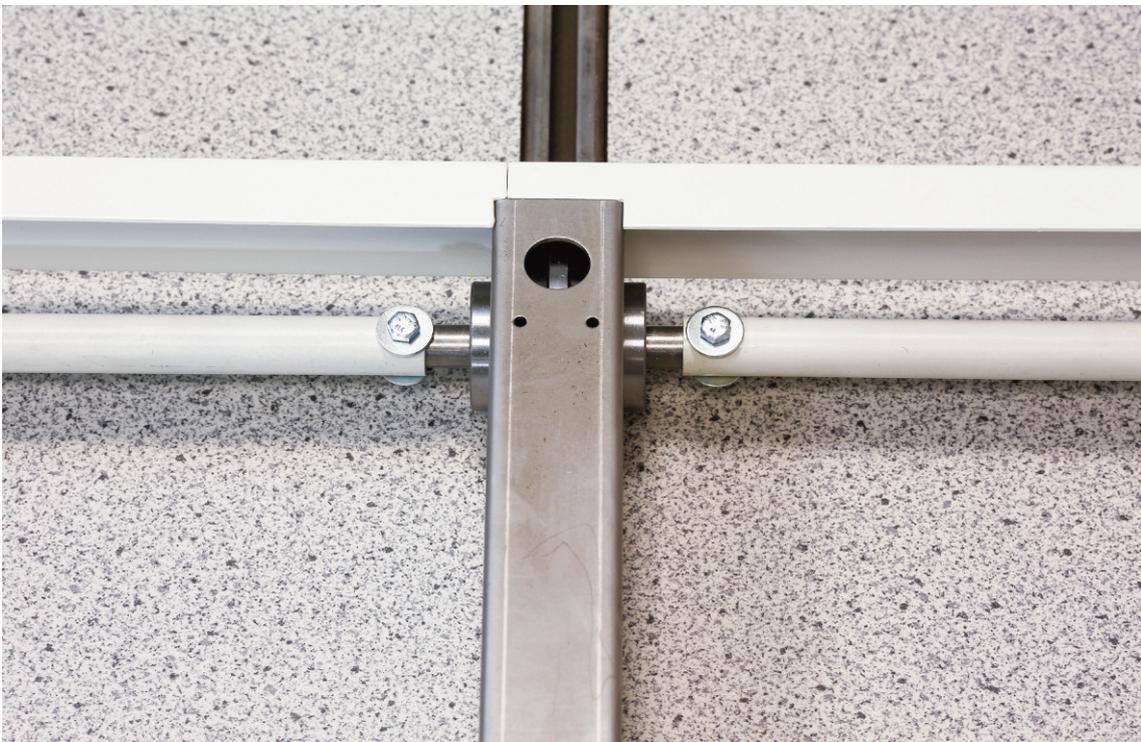
- Loosely connect the drive shafts. Bolt, washer, drive shaft, wheel shaft, drive shaft, washer and lock nut.



- Facing channels need to be fitted before tightening drive shaft bolts.
- Screw facing channels and fillet pieces into position using self-tapping screws.



- Tighten drive shaft bolts firmly.





- Remove temporary nuts from drive assembly fixing bolts in front carriage.
- Offer drive assembly to front carriage then position chain over front carriage sprocket. Lift to locate drive assembly fixing bolts and tighten chain.
- Fix drive assembly to upright by tec screwing from inside the unit into the drive assembly fixing plate.
- Lift drive assembly as the bolts are tightened. **Note:** Tighten bolts firmly.



- Repeat as before.
- Fix hand wheels when carriage assembly is completed.

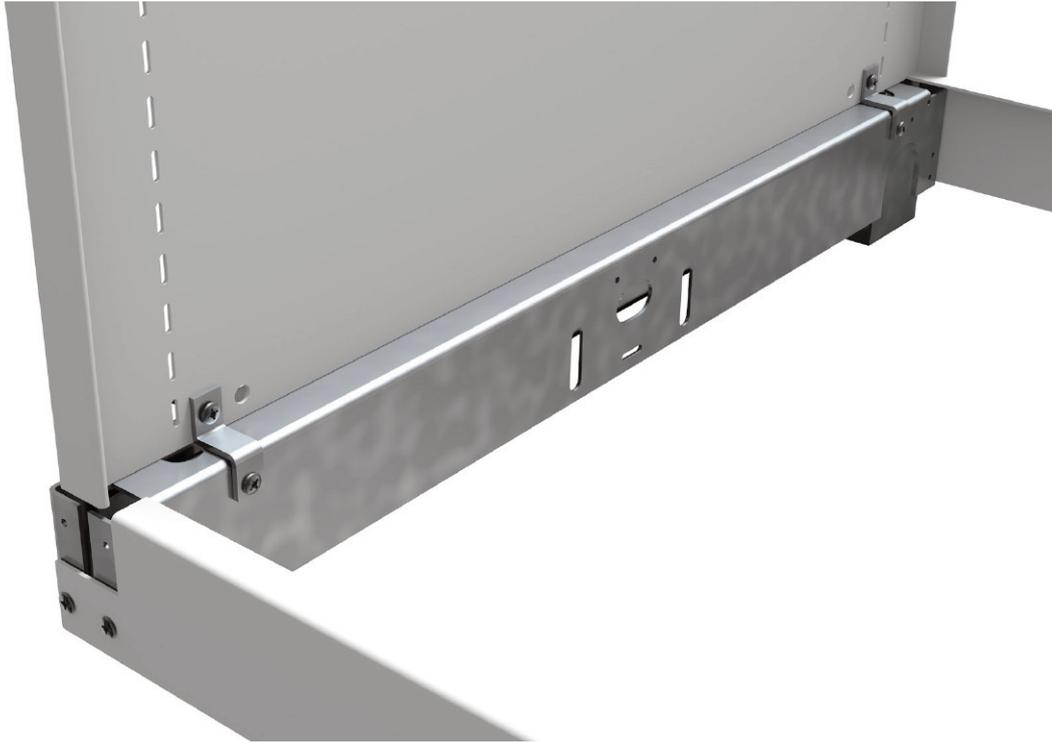


3.05 Shelving Assembly

- Assemble shelving as per shelving installation manual.



- Fix each upright to the carriage as you go.
- Fix drive assembly to upright with hexagon head screws from inside the unit into the drive assembly fixing plate.



- Fit carriage covers as required.



3.06 Decor Panel Installation

- Fit front panels as per supplementary instructions.
- Re-fit hand wheels.





4:01 Signage

Signs are required to be attached to or close to the installation.

These signs should:

- give clear guidance on the system operation.
- indicate the safe working loads of the shelving and mobile bases.
- give good housekeeping and regular inspection procedures.

Note: Shelves not shown, customer can position shelves as desired within loading limitation.

4:02 Hand Over

It is of the upmost importance that the installation engineer meets with the user's representative on completion of the job, not only to ensure that they are happy with the installation but also to be trained in its use including:

- Shelf Loadings, bay loadings and shelf position/omission
- Operating Instruction
- Good House Keeping
- Routine Checks
- Contact Details
- Warranty Period
- Completion certificate to be signed by the customer/user and installer confirming hand over has been carried out correctly and that the customer/user understands all procedures and is able to train other users.
- Completion certificate to be signed by user

4:02.1 Loadings and Structural alterations

Refer to Section on signage 4:01. See page 30.

4:02.2 Operating Instructions

The following operating instructions form part of the mobile users training. No individual should be operating the mobile system without firstly attending this training course. All operators should be aware of the person, within their organisation, who is responsible for the system and how to contact them.

1. Always be aware of the load and dimension limitations of each shelf and the maximum permissible bay load.
2. There is a push pull hand wheel lock in the centre boss of each hand wheel. Push in to lock and pull out to unlock. At rest, all locks must be engaged and this should be checked when approaching the installation.
3. The principle of the mobile system is that the mobile units are moved from right to left to create a walkway to access the shelving units. Any open walkway into the system must be checked for occupants prior to moving any mobile unit.
4. Once the operator is satisfied that there are no obstructions of any type within the mobile system, the lock on the mobile unit that is required to be moved can be released, by pulling the centre boss outward. The hand wheel can then be rotated to move the unit in the required direction. Avoid any rapid acceleration or deceleration. When the operation is complete the hand wheel lock must be engaged by pushing the centre hand wheel boss inward so that again the system is at rest and all locks are engaged.
5. This procedure can be repeated until the desired opening is achieved.
6. **Only move one mobile unit at a time. One handwheel should not be used to move more than one unit (This could damage the drive chain).**
7. Do not over load shelves or bays.
8. Do not store contents greater than shelf depth.
9. Do not store anything on top of the bay.
10. Do not use excessive force on the hand wheel, if the unit does not move easily then there will be a reason for this that will need immediate investigation.
11. Always be vigilant during use. Always check for debris or items left on the floor and tacks. Always observe the Good House Keeping rules.
12. Report immediately anything out of the ordinary to your supervisor.
13. If in doubt contact sales@lionsteel.co.uk

4:02.3 Routine Checks See section 4.04 General Inspection Procedure

4:02.4 Contact for warranty and service contracts

e: sales@lionsteel.co.uk
t: 0161 368 4286

4:02.5 Training See section 1.03

4:02.6 Completion Certificate Two copies must be signed, one to be kept by the installer and one by the end user.

4:03 Good House Keeping

Day to day use – It's important to remember that the wheels of the mobile units run on tracks and that any obstruction on the track will cause either increased effort or prevent the unit moving altogether. The content stored has a great bearing on potential debris problems so procedures need to be put in place with this in mind. Loose folder binders, paper clips and general contents are commonly found between open units and, if left, can become trapped under the units.

First rule of good housekeeping is therefore to remove anything that falls to or drops on to the floor as soon as possible.

Cleaning – The frequency and depth of cleaning is dependent on the frequency of use and/or content. General guide lines are:-

- When vacuuming ensure that the inside of the tracks are clear. It may be necessary to pick up metallic objects too heavy to be vacuumed up with a magnet.
- Never use an oil based or wax cleaner on the track. The constant wear caused by the wheels running on the tracks generally keep these track clean.
- Never soak the floor with water when cleaning. This will encourage rust on the track surfaces and soak into the floor edges causing bloating. At most, clean floor surface with a damp cloth. Soak up spillages immediately.
- Always remove debris as and when noticed.

4:04 General Inspection Procedure

Early warnings picked up and preventative measures can be taken as a result of periodic system checks.

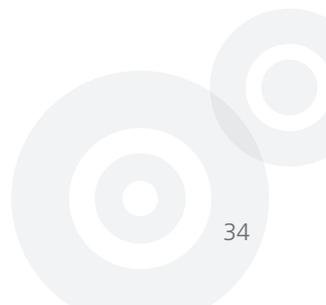
Daily Observations – The user should, at all times, be aware of the both the movement and the environment of the system and therefore should be able to notice any changes. The following will act as a reminder. These are the major elements to look out for:-

- Handwheel lock operation and handwheel slippage.
- Handwheel operation, effort, smoothness, alignment and squareness to tracks during movement of mobile units and at rest in relation to adjacent units.
- Debris on floor and on/in tracks.
- Alignment of shelving to mobile.
- Protrusion of shelving content preventing complete or causing forced closure of gangways.

Annual Maintenance Checks – A PUWER service check should be carried out each year. This can and is usually combined with an engineer's maintenance check and a record of the findings should be acknowledged by the customer and attached to the system. Checks should include:-

- Hand wheel lock operation, fixing to hand wheel shaft, hand wheel shaft fixing to drive assembly and fixing of drive assembly column to unit.
- Play in drive system, chain adjustment both in drive assembly and front carriage and drive shaft bolts.
- Hand wheel operation, effort, smoothness, alignment and squareness to tracks during movement of mobile units in both directions on full travel and at rest in relation to adjacent units.
- Stability, vertical alignment of shelving and alignment of shelving to mobile base unit along its length.
- Stops stability and positioning.
- Damage to shelving uprights, shelves and accessories.
- Damage to and fixing of facing channels.
- Anti-tip fixing and adjustment.
- Front panel fixing and damage.
- Fixing of shelving to mobile carriages.
- Structure stability of shelving.
- Tracks for wear, damage, deflection, track joints and alignment.
- Flooring for damage, deflection, flooring support, tripping hazards and flooring joints.
- Ramp, tripping hazards and ramp joins.
- Static fixing, stability, vertical and horizontal alignment.
- Check general area; floors, walls.

NOTES:



NOTES:



1 lockers

All Probe products are available from a wide network of authorised Probe dealers



2 shelving



3 cupboards & work stations



4 kinetic mobile shelving



5 technic shelving



6 cloakroom



7 cabinets



8 ultrabox plastic lockers



MADE IN THE UK

