

FREESTAND ROOF GUARDRAIL

Lockinex
great service, great quality

INTRODUCTION

Lockinex Freestand Roof Guardrail system utilises Lockinex Key Clamps, Tubing & concrete counterweights seated on rubber mats and does not require physical fixing through the roof surface. The system can be installed on flat roofs or roofs where an incline of up to 10 degrees is present.

APPLICATION

Lockinex Freestand Roof Guardrail provides a safe working environment for personnel who may frequent roof areas. A safe working area is constructed, enabling maintenance of equipment such as air conditioning units, telecoms, water tanks, communication services or general maintenance to the roof itself.

The system can be installed to the complete roof perimeter or installed to provide direct access to a particular area on a roof.

Once installed, the system will provide many years of virtually maintenance free service life.

DESIGN

There are two styles available.

Classic

This system has straight vertical posts.

Curve

This system has curved upright posts.

The recent introduction of "J" Clamps has reduced installation times by making the assembly easier and quicker.

Other benefits include horizontal rails are 6.0 mtr long or 3.0mtr long, with simple end to end connections using standard clamps.

Turns and angle changes are also simplified using various standard brackets.

COMPOSITION, MANUFACTURE

Designed & tested to comply with BS EN 13374 Class A.

Lockinex Key Clamps

Manufactured to BS EN 1563:2011

BS EN 1562:2012

Galvanised to BS EN 1461:2009

Tubing

Manufactured to BS EN 10255:2004

Galvanised to BS EN 10240:1998

& BS EN 1461:2009 (On application)

Concrete Counterweights

Manufactured to BS EN 1917:2002

Rubber Mats

Elastomer type - CR - SBR

Identification, Traceability

The system is clearly marked with the "Lockinex" brand name. This will provide ease of contact should the system require further components for adaptation & alterations etc.



SYSTEM COMPONENTS



Post type FS-1

Double counterweighted end post with J-clamps pre-assembled onto the vertical post. Required on ends of a system that is MORE than 6 meters in length.



Post type FS-2

Single counterweighted post with J-clamps pre-assembled onto the vertical post.



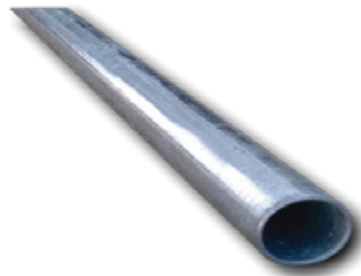
Post type FS-3

Middle post with J-clamps pre-assembled onto the vertical post.



Post type FS-5

Triple counterweighted end post with J-clamps pre-assembled onto the vertical post. Required on ends of a system that is LESS than 6 meters in length.



Handrail Tube

Galvanised tube available in nominal lengths of 3 or 6 meters.



FS-8

Vertical End Tube

Pre cut tube used to connect upper rail to lower rail at the end of a section of guard railing, forming a "D" End.

Layout Details

Diagram 1

6 mtr run or less. (Requires Triple counterweights to increase stability).
Lockinex Counter weighted system- Requires Triple weights OR Fixed rails on each end & Single Counter weight centrally.

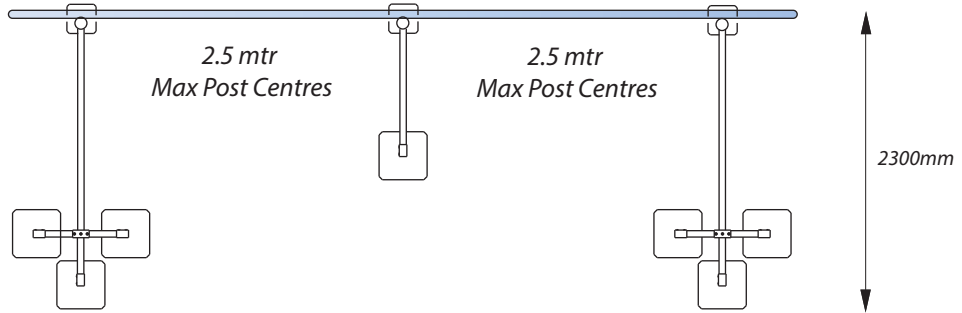


Diagram 2

More than a 6 mtr. run.
Lockinex Counter weighted system- Requires Double weights OR Fixed rails on each end & single weight.

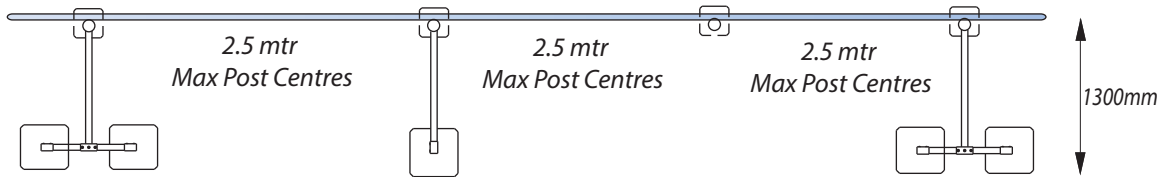


Diagram 3

Longer runs.
Lockinex Counter weighted system- Requires Double weights Or Fixed rails on each end & single weights on each alternate post.

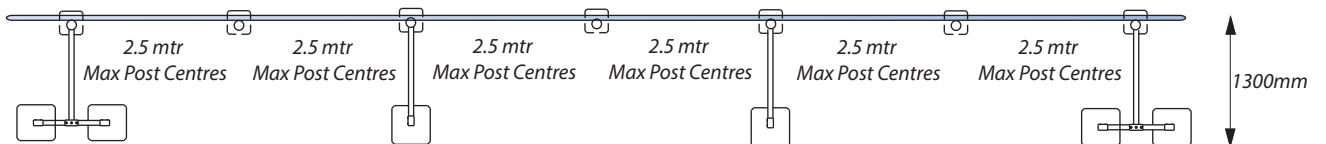


Diagram 4

Corners & End fixings.

Corners - It is recommended that a maximum projection of tube beyond a post should be no more than 500mm. The rail can then continue on 2.5 mtr to the next post.

End fixing - If rails can be fixed at their ends to part of the existing structure, the nearest post should be no more than 2.5mtr from the fixing point.

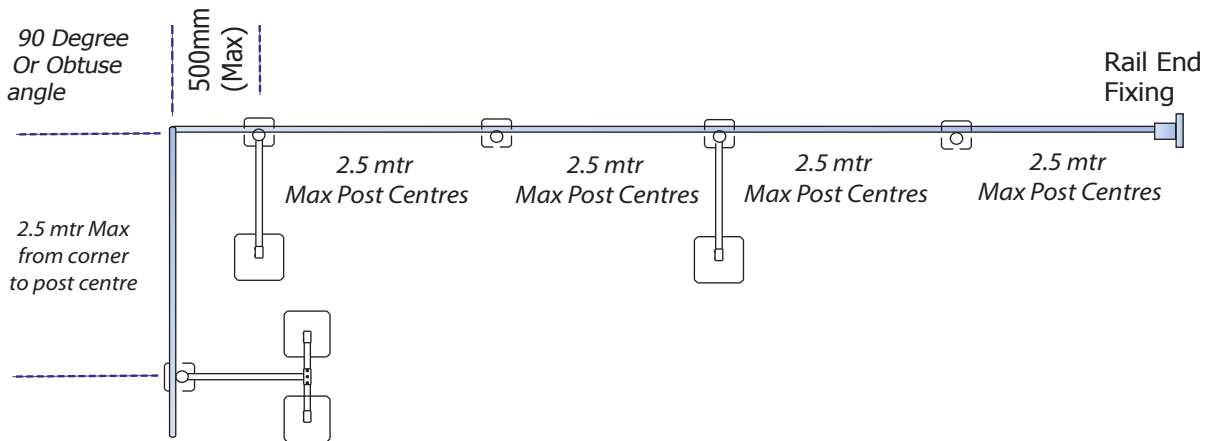
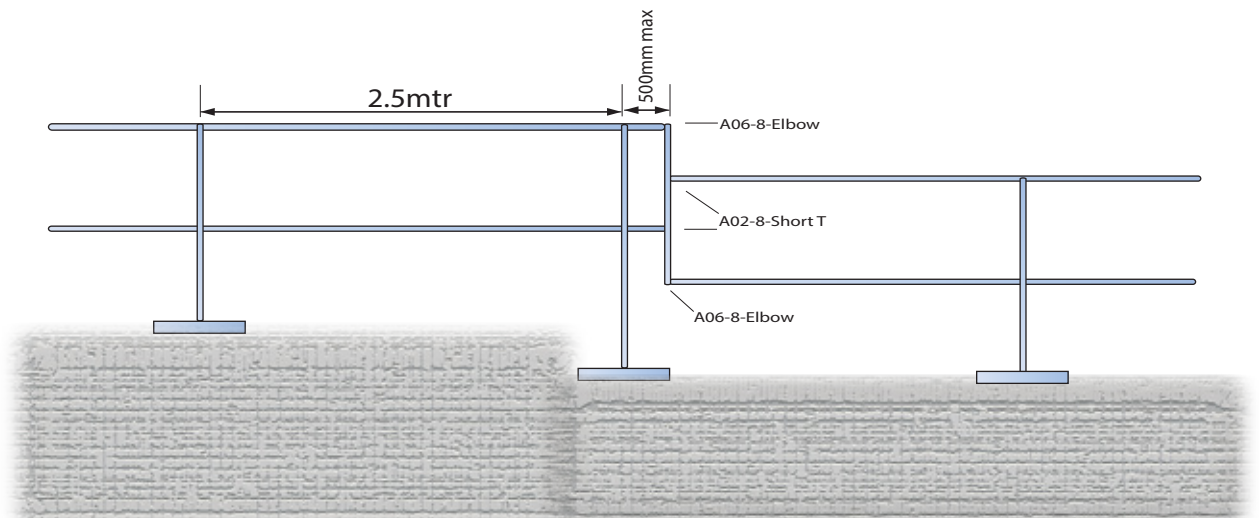


Diagram 5

Step up/down.

Where the levels of the roof change, the diagram below shows how to utilise some of the Lockinex key clamp range to make the transition across the two levels. The vertical connection has to be obtained from a standard piece of guardrail tube. Measure and cut accordingly.



Clamps from the Lockinex key clamp range.

A selection of clamps are shown below, which can be utilised to work with our counter weighted system.

(For the full range of clamps visit the www.lockinex.com web site).



A02-8
Short T.
Used for step ups
in rails.
(See diagram 5).



A06-8
90 degree elbow joint.
Used for forming 'D' ends to
terminate a run of handrail
& turning rails at corners.



A05-8
Multi angle swivel joint.
Alters directions of rails
85-180 degree.



A08-8
Straight rail connector.
Connects rails end to end.



A10-8
Rail end Termination.
Ends of rails can be
fixed to a structure.



A12-8
Structural top fixing
base plate.



A14-8
Structural side mounted
base plate.
Fixing holes vertical.



A15-8
Structural side mounted
base plate.



A16-8
Structural side mounted
base plate.
Fixing holes horizontal.

Maintenance/Design/Manufacture

Maintenance

Manufactured from either mild steel, with a hot dipped galvanised finish to BS EN1461:2009 Stainless Steel Grade 316 (Mill Finish) or Aluminium.

Once installed this product requires very little maintenance.

The systems integrity relies on the counterweights, installed as the layout details. Any alterations or removal of counterweights will greatly affect the system. Referring to the layout diagrams within this document, will provide the guidance to make changes without compromising the Guardrail's performance & compliance.

Structural fixings should not require any further attention. Depending on the local environment it may be prudent to have these checked at an agreed interval to ensure there has been no tampering or removal.

Contact the company for further assistance if required.

Design

When standard kit components are fully assembled, the guardrail will comply to current UK regulations & exceeds many European regulations (EU Regulations are generally to a lower specification than those in the UK).

Should the contractor/third party installer adapt/alter the system in any way, consideration should be given to the proposed alterations.

Manufacture

Warranted & Certified by Lockinex UK Ltd

Components Certified Galvanised to BS EN1461:2009 (Standard system)
Stainless Steel Grade 316 (Optional)

Satisfies CEN BE EN ISO 14122-3:2001 (When installed with toeboard system)
Complies with EN 14122 Part 3 & EN 13374 Class A
UK Health & Safety Working at Height (Amended 2007)
Designed to comply with Wind Loadings BS 6399:Part 2: 1995

Lockinex UK Ltd reserves the right to alter, re-design, remove options or remove products from sale at any time without notice.