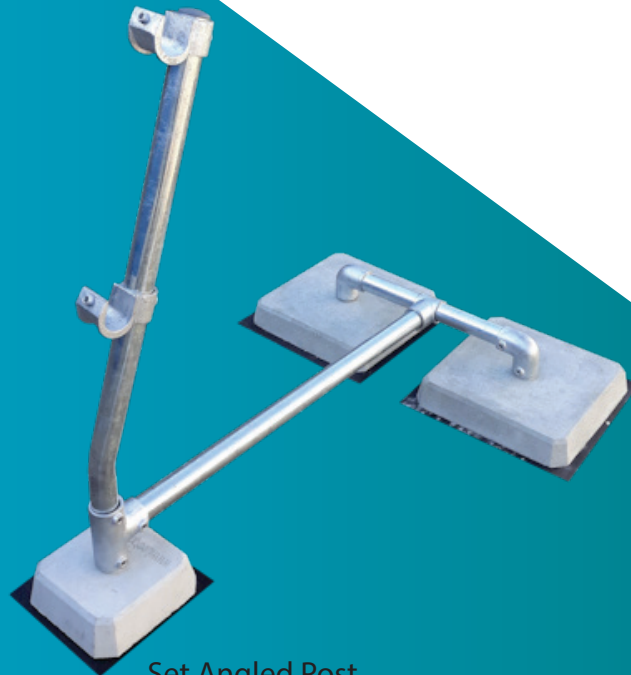


Classic Straight posts

# FREESTAND ROOF GUARDRAIL



Set Angled Post



Curved posts.

**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 a 20 year minimum service life with minimal maintenance.

## DESIGN

Designed & tested to comply with BS EN 13374 Class A. Also complies with BS EN 14122-3 when used with toeboard system or where parapet wall is present.

Upright posts are supplied pre-assembled ready for install onto concrete pads. All posts are set up to meet BS EN 14122-3 as standard with a 1100mm tall minimum finish height and horizontal rails spaced so top gap is less than 500mm, ready for toeboard installation (if required).

For compliance to BS EN 13374 Class A, minimum finish height is 1.0mtr with gaps in horizontal rails to be less than 470mm. To achieve this, J clamps can simply be lowered on the upright tube to required position on site. If you require posts to be set to this standard by us prior to delivery, please notify us when placing your order.

There are three styles of guardrail available;

1. Classic - This system has straight vertical posts.
2. Curve - This system has curved upright posts.
3. Set angled posts - Pre set bend is incorporated into post.

The use of "J" Clamps reduces installation times by making the assembly easier and quicker. Other benefits include horizontal rails which are 6.0/6.4mtr long or 3.0/3.2mtr long, with simple end to end connections using standard clamps. Turns and angle changes are also simplified using various standard brackets.

## COMPOSITION, MANUFACTURE

Lockinex Key Clamps

Manufactured to BS EN 1563:2011  
BS EN 1562:2012

Galvanised to BS EN 1461:2009

Tubing

Manufactured and galvanised to relevant standards.

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.



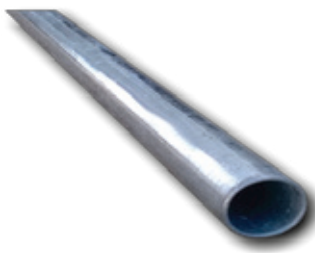
### Post type FS-3

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.



### Forginex 11 Toeboard

C shaped toeboard used when conforming to BS EN 14122-3 (1100mm top rail finish height).



### Lockinex-08

Galvanised steel bracket used to connect the Forginex 11 toeboard to the base of the posts.



### Forginex 40

Galvanised straight kickplate connector (inc. fixings).



### Forginex 42

Galvanised 90 degree kickplate connector (inc. fixings).



### Forginex 44

Galvanised 45 degree kickplate connector (inc. fixings).

## 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.

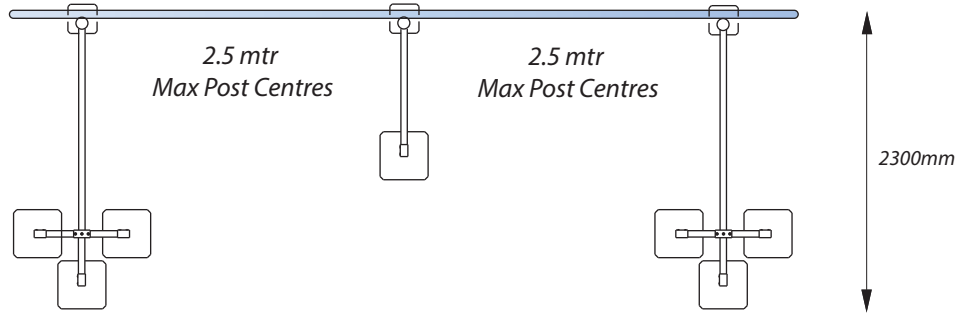


Diagram 2

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

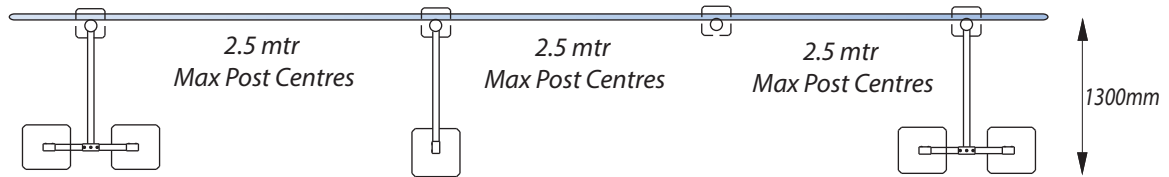
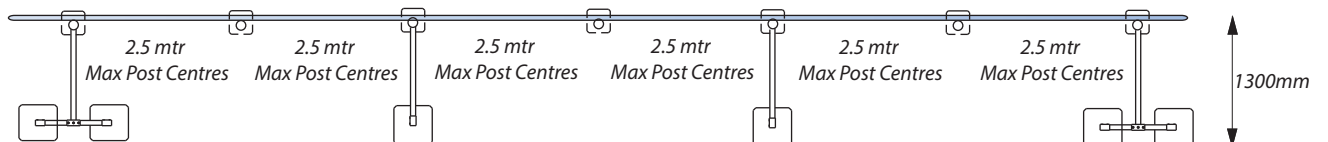


Diagram 3

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

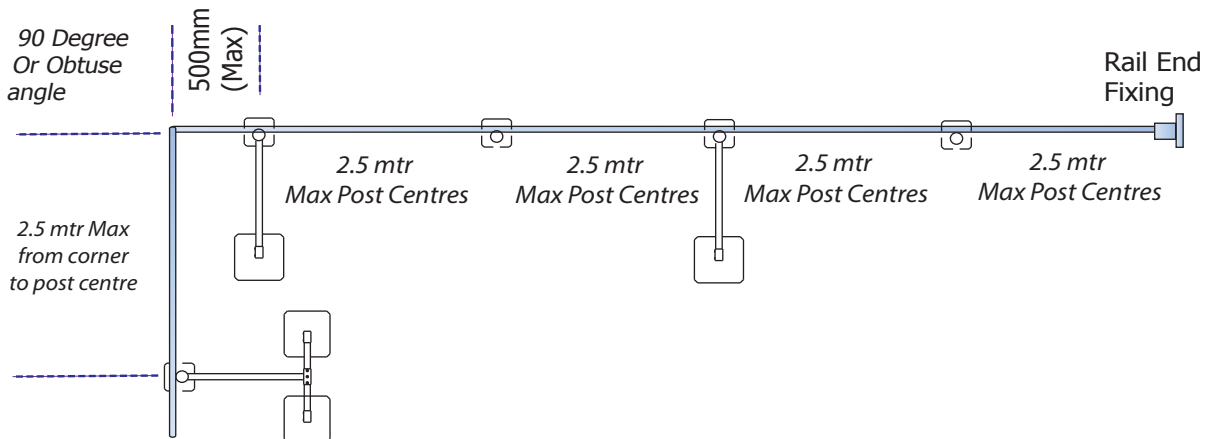


#### Diagram 4

##### 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.

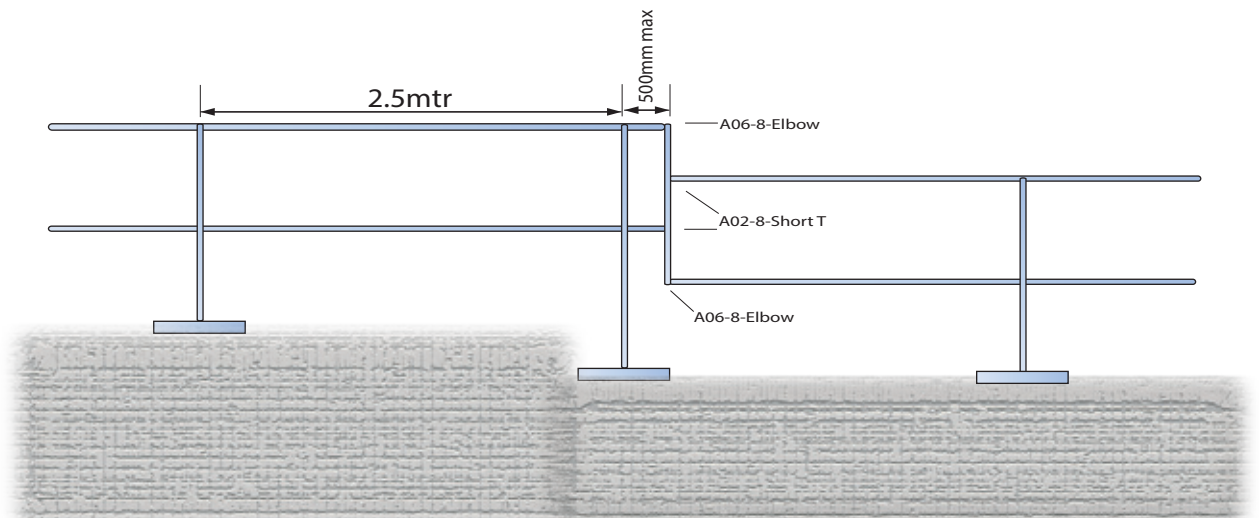
End fixing - If rails can be fixed at their ends to part of the existing structure, the nearest post should be no more than 2.5mtr from the fixing point.



#### 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](http://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.