



Evorail Top Fix and Front Fix O&M Manual



SAFETY SOLUTIONS

Evorail Top and Front Fix system

Evorail has its very own unique design which makes the system aesthetically pleasing like no other on the market.

Evorail Top Fix system provides a permanent edge protection fixed to which ever application is required;

- ✓ Composite / Built-up
- ✓ Standing Seam
- ✓ Timber
- ✓ Concrete
- ✓ Brick
- ✓ Steel

The strength, stability and safety of Evorail is derived from our designed fixing systems, which prevent water ingress when fitted to the roof sheet.

Evorail is Robust

With all of the systems fixings grade A2 stainless steel, its extra smooth galvanized finish (EN ISO 1461) gives it a minimum lifespan of at least 25yrs, therefore making the system maintenance free.

Evorail is Modular

The system consists of galvanized pre-assembled uprights and 2.5mt rails. The 2.5mt hand and knee rails are connected with the Evorail Eazy clamp upright, which is fast, straightforward and easily adjustable to provide that perfect level finish.

Evorail is Versatile

The system has been specifically designed to fit all shapes and sizes of flat roofs, even circular designs. The system can also cope with level changes, roof falls and difficult designs, such as ductwork passing over the roof edge and cable trays/plant mounted at the roof edge.

Testing & Certification

All Evorail systems have been tested and approved by Satra Technology. Full documentation is available on request.

All Evorail systems comply with the following requirements:

- BS EN 14122-3
- European Directive 2001/45/CE
- BS6399 ; Part 2 1997 Code of Practice for Wind Load.
- Working at heights regs. 2005

Evorail Aesthetics

The extra smooth galvanized finished can be further enhanced with application of powder coating. This can be specially ordered to the client's choice of any RAL No they require.

Evorail standard system is one of many freestanding systems available in our product range.

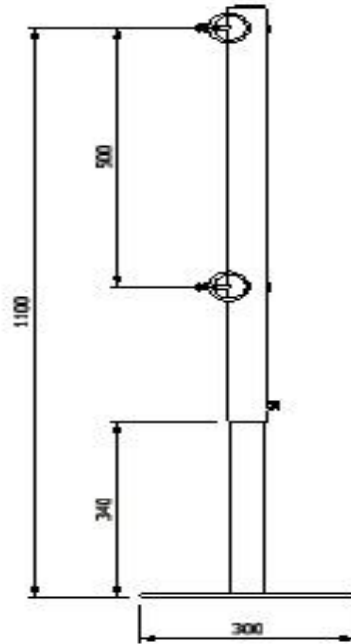
- Evorail Standard
- Evorail Non Trip
- Evorail Collapsible
- Evorail Radius

In a choice of materials

- Galvanized
- Aluminium
- Stainless steel

We also offer bespoke systems designed by our in-house fully experienced design engineers.

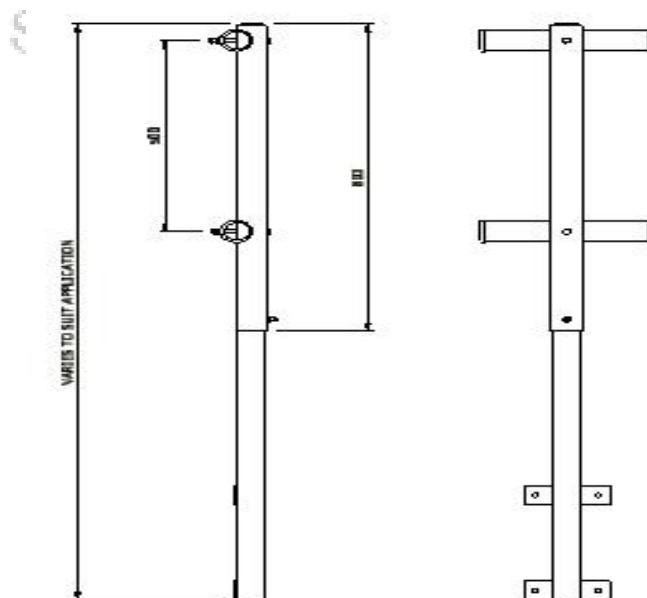
Specification



Evorail Top Fix Upright ERTFU

The upright is used as the main support to the system, the 2.5mtr rail easily slides in and is locked on using a 5mm allen key. The stop inside the upright gives 2.5mt centres naturally without the need of measuring on site.

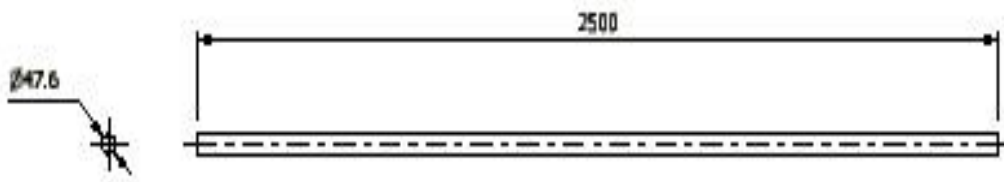
Material – galvanized to BS EN ISO 1461 Component weight – 7 kilos



Evorail Front Fix Upright

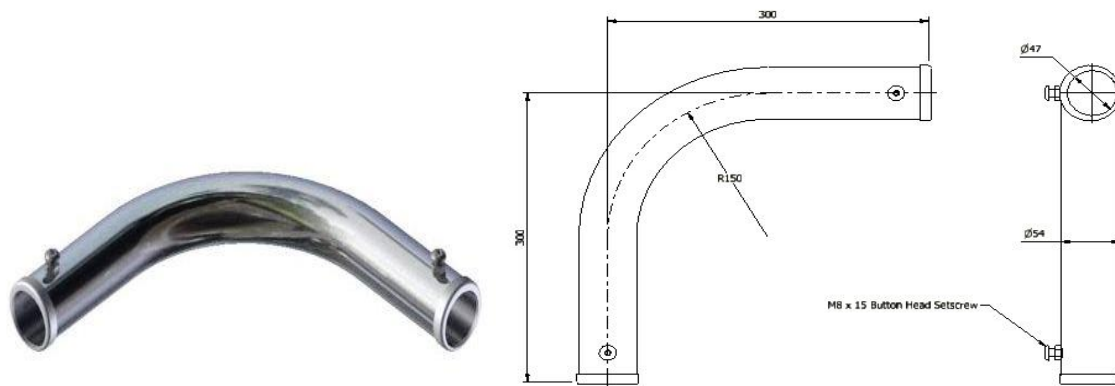
The upright is used as the 2nd main support to the system, the 2.5mtr rail easily slides in and is locked on using a 5mm allen key. The stop inside the upright gives 2.5mt centres naturally without the need of measuring on site.

Material – galvanized to BS EN ISO 1461 Component weight – 6.5 kilos



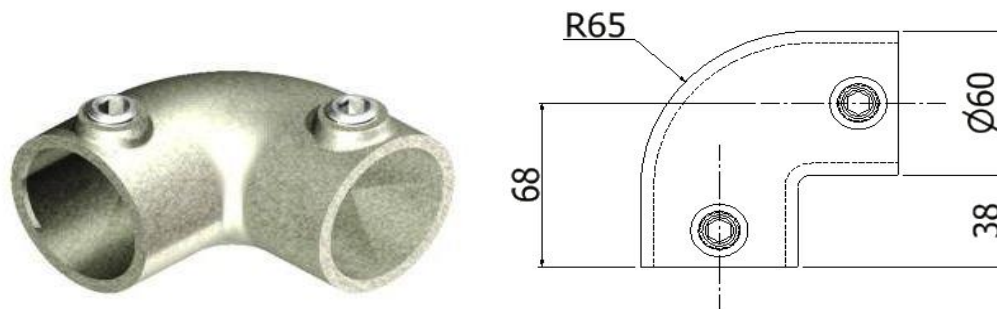
Evorail 2.5mt Rail – ERAIL

The 2.5mt rail connects the long and short upright together, top and mid rail.
 Material – galvanized to BS EN ISO 1461 Component weight – 6.0 kilos



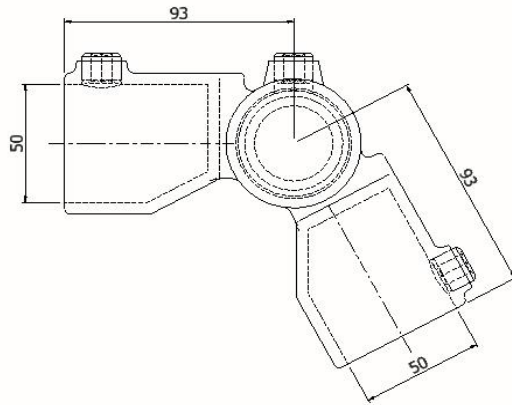
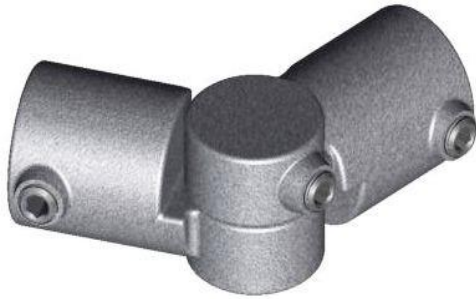
Evorail Sweeping Bend – ERSWB

The sweeping bend provides the means to deal corners.
 Material – galvanized to BS EN ISO 1461 Component weight – 1.4 kilos



90 Degree elbow – ER90E

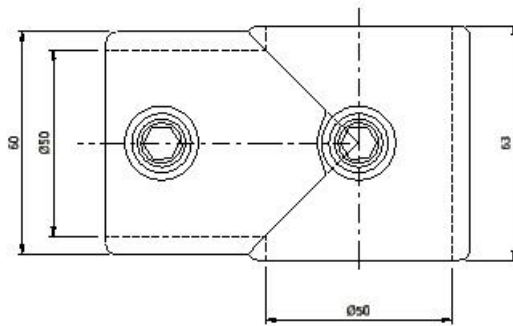
The elbow is supplied with freestanding ends and is also used to deal short tight corners and changes in level.
 Material – galvanized to BS EN ISO 1461 Component weight – 1.1 kilos



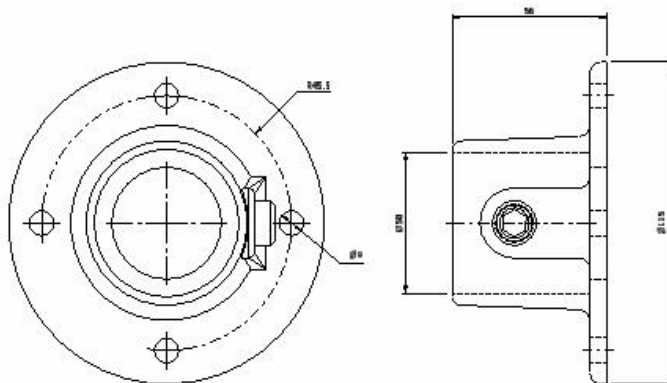
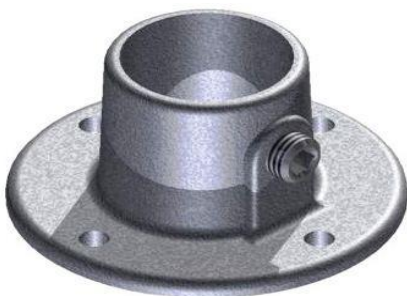
Multi bend – ERMUB

This allows you to deal with corners that aren't 90 degrees, and also can be used for changes in roof level.

Material – galvanized to BS EN ISO 1461 Component weight – 1.5 kilos



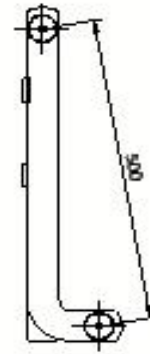
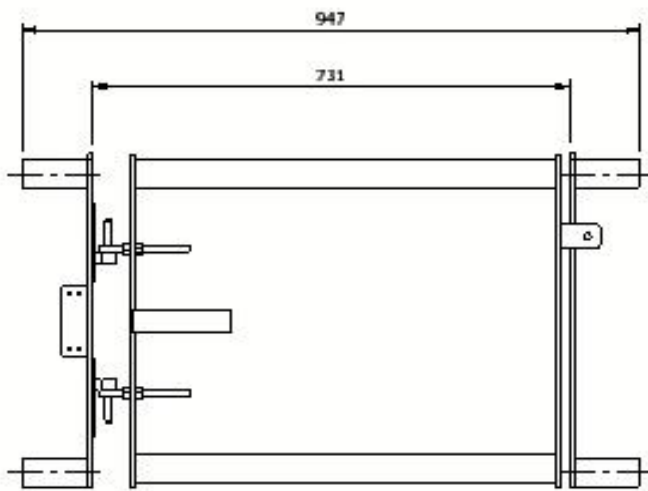
T – piece – ERTPI The T piece is used in conjunction with a free standing end and is used many different instances. Material – galvanized to BS EN ISO 1461 Component weight – 1.0 kilo



Wall bracket – ERWBK

Used at the end of a run where you can fix into a wall/cladding.

Material – galvanized to BS EN ISO 1461 Component weight – 1.1 kilos



Evorail Self Closing Gate – ERSWG

Used to safely gain access through the Evorail system.

Material – galvanized to BS EN ISO 1461 Component weight – 20 kilos

General

Evorail standard is a fully designed and tested guardrail which uses cantilever balanced uprights, without the requirement for physical fixing into the roof's membrane / structure. It's a permanent freestanding guardrail which has adjustment in the uprights which caters for rise and falls of the roof, therefore keeping the system level to the parapet at all times.

Material

- Evorail standard is manufactured from steel to BS EN10025 S275, with a galvanized finish which is extra smooth - BS EN ISO 1461.
- Evorail – hand & knee rails are 48mm external diameter.
- All fixings are grade A2 stainless steel.
- All additional cast clamps used are galvanized malleable cast iron produced to BS EN 1562.
- Any on site tube cuts can be protected by a selection of plastic cap ends, to prevent exposure to rust.

Layout

- Height of Evorail is set at 1100mm.
- All uprights are normally set at 2.5mt centres
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Test criteria

Evorail standard was tested to the Health and Safety Executives Specialist Inspectors Report No 15.

- All testing was carried out on a roof pitch of 10 degrees as Building Regulations stipulate a flat roof can be 0 – 10 degrees in pitch.
- All guardrail testing was carried on a 5mtr straight run without any returns or double weights.
- A 0.7kn load was applied to the top rail at the very end of the 5mt straight run without moving more than 100mm at the base.
- A 0.3kn load was applied to the top rail between vertical supports in the first bay from one end. Tube deflection did not exceed 35mm.



Tel: 01257 260441
Fax: 01257 233866
Email: info@akmfabrications.co.uk

AKM Fabrications
Unit 6, Yarrow Business Centre
Yarrow Road
Chorley
PR6 0LP

Visit our website at: www.akmfabrications.co.uk