



Site services and safety systems

RigiSystems - Site Services

Nowhere is RigiSystems' systems approach to roof construction more evident than in its provision of on-site services, which ensures that not only can all the component parts of the system be sourced from one supplier, but that all ancillary products can be sourced, supplied and fitted using RigiSystems dedicated on-site services team.

This approach ensures that, in turn, even these ancillary products and services meet RigiSystems' own high quality standards and without any compromise to the roof structure.



RigiSystems - Fall arrest

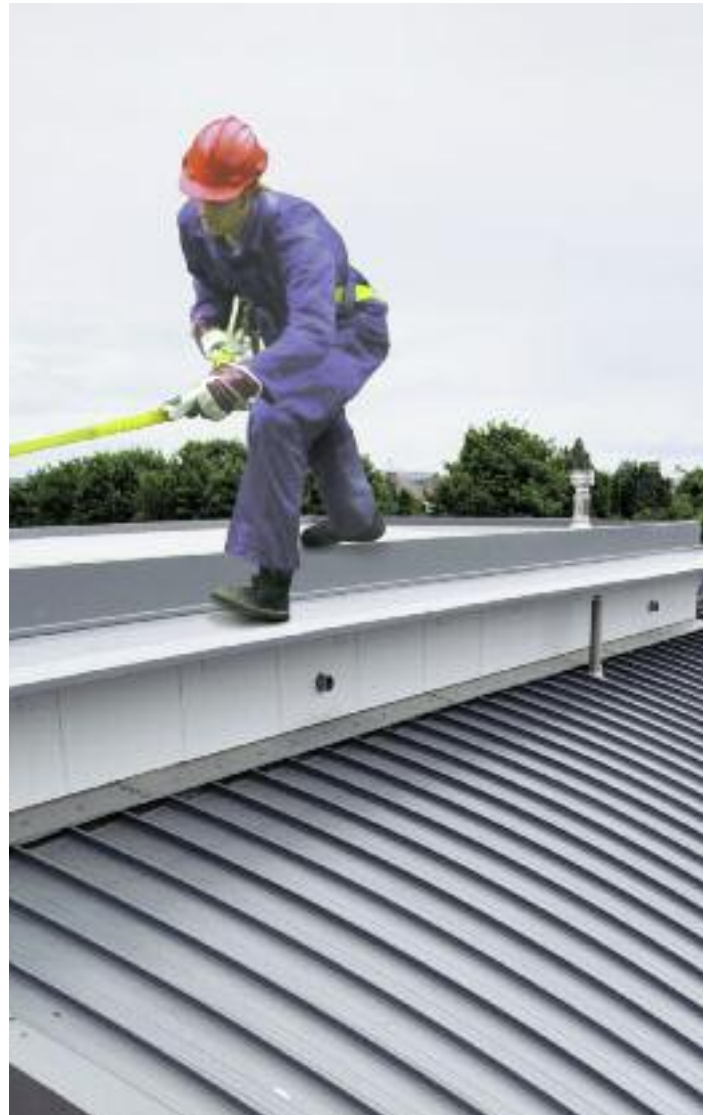
Building designers are required by law to take account of post-construction safety during the design stage. Our systems approach to roofing construction can aid considerably in the designing in of passive safety, for instance in the detailing of wall/roof parapet interfaces and the provision of wide, walkable and durable gutter systems. Additionally we have details that work hand in hand with the roofing systems and as such are also installer friendly.

Rooflights, for example, are often a concern, and by specifying RigiSystems rooflights as part of the system, true passive safety will be built in to that system as the rooflights will have been tested in conjunction with the roofing system – not alone – to ensure that the metal/GRP combination will ensure that no-one can fall through in service.

Passive safety is not always possible, however, and RigiSystems also supplies a range of fall arrest or fall restraint systems all of which have been thoroughly tested in conjunction with the Ziplok standing seam and with trapezoidal systems. Exhaustive testing is carried out with the load in various directions, and the applied loads are measured and recorded by the transducers wired back to the recording system. The attachment of the system to the roof is therefore assured, whatever the gauge of metal or profile you are specifying, as well as the performance of the fall restraint system itself.

RigiSystems' fall arrest systems use either an 8 mm 316 stainless steel cable, a unique 16mm polyester parallel fibre cable, or an extruded aluminium rail. All systems offer exceptional benefits and the polyester parallel fibre cable is available in a range of colours to suit a building's exterior.

Systems can be fitted not only to any of RigiSystems' roofing products, but also to other manufacturer's systems, including membrane roofs.



Applications

Fall arrest systems are appropriate where there is a need to provide a facility to enable safe working at heights in accordance with current Health and Safety at Work and CDM Regulations. They can also be used where there is a requirement for safe access to a variety of otherwise dangerous operations or to restrain personnel from putting themselves at risk.



RigiSystems - Fall arrest

Safewire stainless steel cable system

Based on a high quality steel cable, the Safewire system allows multiple workers to attach at any point on the cable and move over the intermediate support brackets using the special attachment device.

The Safewire system offers a cost effective fall arrest system where cost is a major consideration, with spans between support anchors of up to 12m.



Safecord synthetic cable system

Constructed from a unique 16 mm polyester parallel fibre cable, with a minimum breaking strength of 76 kN, the Safecord system also allows workers to attach at any point on the cable and move over the intermediate support brackets using a special locking link device, allowing complete freedom of movement and security. Special corner units allow passage around a variety of corner situations, and intermediate supports at 16 to 30m centres help preserve the integrity of the roofing fabric.

The Safecord system is unrivalled in the market place for its unique construction, unique fall arrest capability and overall competitive advantage. It has a built-in wear indicator, offers low deflection, reduces structural loading and is capable of supporting multiple workers for fall arrest. In addition it has a high resistance to many chemicals and environmental conditions.



Force management anchors

RigiSystems have developed a range of roof anchors which support the cable systems when used on a variety of roof structures, including Ziplok and Lokroll.

These special patented anchors permit the use of roof sheets as structural anchors, by limiting the forces to less than 10 kN through a built-in energy absorber. They are fitted with minimal disruption, are self-sealing and preserve the integrity of the roof structure, by eliminating the need for through-fix posts in many cases. All anchors are certified to BS EN795 Class A and C. Early consultation is recommended to ensure the correct technical and design detail is achieved.



Saferail

The Saferail system is the very latest in fall protection technological development. The extruded aluminium rail system can be retro-fitted if required and provides an extremely aesthetically pleasing system, being almost flush to the roof surface.

Saferail eliminates many potential hazards associated with cable based systems such as cable fretting, cable tension, cable deflections and swing fall hazards, so providing an extremely safe and functional safety solution. In addition, even load distribution through the fixing system ensures complete safety in the event of a multi-user fall without damaging the integrity of the roofing system.



RigiSystems - Walkways



Designed to complement Ziplok standing seam profiles, but compatible with most systems, Safegrip aluminium walkways provide a safe walkway system which also removes the risk of damage from foot traffic.

No fixing through the roof outer skin is required so the walkway does not compromise the integrity or performance of the Ziplok system.

RigiSystems' Safegrip walkways are available with slim-profile handrails to one or both sides, creating the ultimate in safe access, while the 25mm diameter aluminium posts and 8mm stainless steel wires are unobtrusive in appearance.

The handrail system can be removed and installed without specialist tools, as and when required.

In addition to prolonging roof sheet lifespan, Safegrip denotes the access route across roof surfaces, is low maintenance, cost effective and does not affect any of the Ziplok warranties



Specification

External frame - aluminium extrusion 6082TF alloy, thickness 2-3 mm

Support rails - aluminium channel 6082TF alloy 3mm thick

Treads - trapezoidal profile, fully perforated, 30% free area, alloy 3105H26 1.6mm thick

Handrails - extruded posts 32mm OD x 3mm wall, 6082TF alloy

Handrail caps - 8mm UPVC injection moulded

Wire handrails - 8mm 17 strand steel cable, type 304

Tensioners and cable attachments - type 304 stainless steel

Standard unit size - 3m x 600mm, with 100mm upstand integral kick plate each side

On roofs up to 6° pitch walkways can be laid to falls. Over 6° levelling kits are available.

Special sections, such as corner units and staircase units, are manufactured to order - please consult RigiSystems' Technical Department for details.

Units are welded by TIG process, and RigiSystems offers a complete supply and fix service, from design through manufacture supply and installation.



RigiSystems - Zipklip

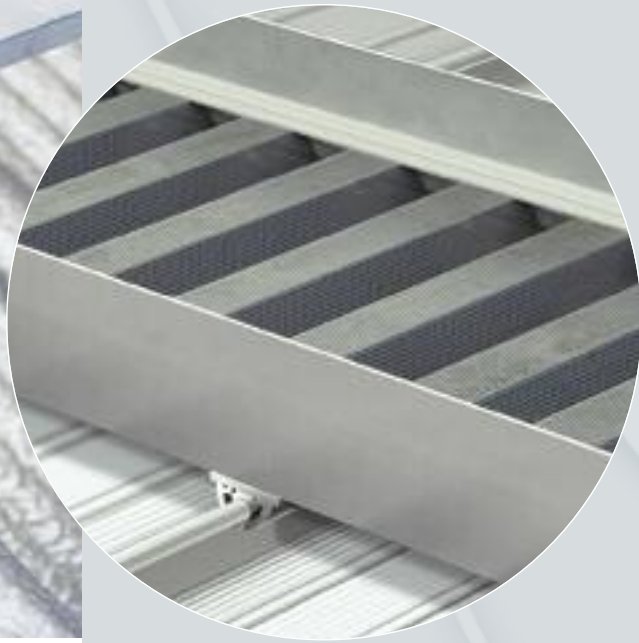


The simplicity of the ZipKlip™ clamp, with its ability to be repositioned if required, makes it ideal for the construction of temporary walkways or access systems, for example for one-off maintenance requirements.

Specification

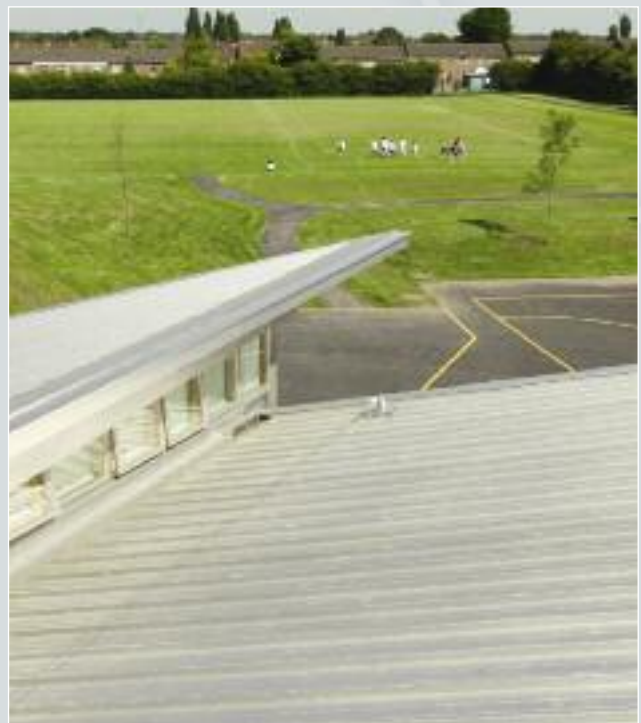
ZipKlips™ - 6082TF alloy.

Screw - stainless steel type 304 for assembly



Fundamental to the ease of construction of Safegrip is RigiSystems' unique ZipKlip™ fixing clamp. Designed specifically to complement Ziplok standing seam profiles, it will, however, fit any profiles with a 'bulb' shaped seam.

Supplied fully assembled, ZipKlip™ is attached to the seam of the profile with one simple screw, which when tightened through the fixing holes of the walkway simultaneously attaches both items to the roof structure. If required, ZipKlip™ can be released just as simply, should, for example, the walkway need repositioning.



RigiSystems - Specialist on-site welding



The outstanding performance of standing seam systems can be compromised where joints, penetrations or complex details are required. The only way to ensure complete weathering of such details is by on-site welding.

RigiSystems with almost 30 years' experience in welding light gauge materials, is able to offer its skilled welding engineers to carry out this process on-site.

Our on-site welding service includes:

- RigiSystems' fully qualified welding engineers, who each travel with a full set of plant, equipment and consumables
- Simple and straightforward pricing, on a day or metreage rate
- Cleaning and local repainting service for coated materials
- Full guarantee against water ingress on completed work
- TIG, MIG and metal arc processes
- Full cover under insurance backed guarantee on RigiSystems Ziplok Insurance Warranted work
- All work carried out to BS 3019 pt I 1984

For further information and a schedule of rates, please contact a member of the RigiSystems sales team.

TIG process uses a tungsten electrode with the arc shielded by argon-rich gas. It is suitable for steel, aluminium alloys, stainless steel and copper. It produces an extremely smooth welded bead and does generally not require and subsequent finishing process.

MIG process uses a mechanically fed consumable electrode of the same metal as that being welded. It is suitable for the same range of metals as TIG, though it is generally used on thicker materials. Somewhat quicker than TIG, the resulting bead may need subsequent dressing.

Metal arc welding is used predominantly on steel. It employs a consumable electrode and oxidation is prevented by a coating from the electrode which gives off large quantities of gas which envelopes and shields the arc.





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