## Introduction and Index

## Delphini...Engineering Safer Solutions Lifting - Securing - Safety

Safety plays an increasingly vital role in the way companies are managed. In order to maintain profitability and dependability you require a supplier that understands your very individual needs, and provides the right products and advice quickly and efficiently.

This brochure provides details of some of our wide range of products all of which are thoroughly tested, fully compliant and come with exceptional technical support and customer service.

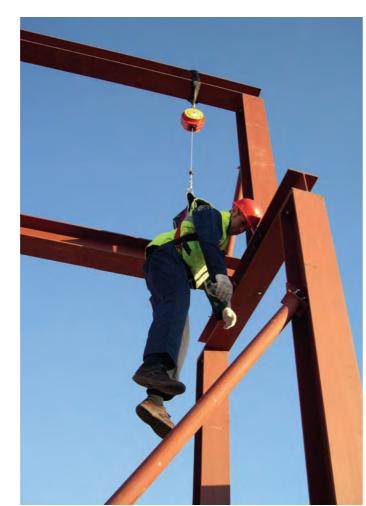
Working closely with Checkmate Safety, we have included some of their latest range of innovative Fall Arrest and Height Safety equipment. This range was developed as a result of the latest independent medical research into the effects of a fall on the body.

The CheckLine single wire lifeline system is technologically advanced to offer the user total security and freedom of movement whilst working at height.

We hope that you will find the brochure of interest and look forward to discussing your specific needs.

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Further information on Delphini's range of products and services can be found in the following catalogues:

### Development

We are committed to a continuous investment programme in both new products and technological evolution, to maintain the huge advances made over recent years and extend the range to meet the challenges that lie ahead.

## Design

Special projects and bespoke equipment design are available using the latest 3D modelling software and dynamic stress analysis programmes.

We are committed to giving engineered solutions to your height safety problems. We can design and manufacture personnel cages that can be used as a working platform or for safe transport of personnel to eliminate many of the risks associated with working at height.

## **Product Testing**

Checkmate maintain a high standard of in-house product testing which meets and exceeds European and International Standards. With a 126 sensor interface monitor; articulated manikin, static weights, two dynamic test rigs and a 75 tonne horizontal test bed, you can be assured that all products manufactured have been rigorously quality assessed.

#### **Q**uality assurance

We hold a quality management system approved to ISO 9001:2000 utilising the latest equipment and techniques.

This enables us to design, test and manufacture Fall Arrest Equipment in house. Quality is guaranteed through its dedicated and professional team for all height safety products and systems.

Delphini working with Checkmate welcomes you ....to the next generation

**PPE Workwear** 

General Products







## Accessories & Training



thimble swaged each end 25m

Small rope bag 260mm dia x 410 mm H

Large rope bag 400mm dia x 580 mm H

Haversack 340mm wide x 700mm H

Medium rope bag 340mm dia x 480 mm H

Kit bag 230mm wide x 250mm deep x 40mm L

Bags

**PPERBS** -

PPERBM-

PPERBL -

PPEKBH-

PPEHSACK -

#### **Rope grabs**

- ARG-Stainless steel fall stop rope grab for 11mm nylon semi static kernmantle rope
- ARGC-Stainless steel fall stop rope grab for 8mm 7x19 stainless rope
- ARGC-Light alloy fall stop rope grab for 11mm nylon semi static kernmantle rope
- **STOPGO-** Stop go device rope grab and descender for use with 11mm nylon semi static kernmantle rope

#### Training

Courses are available to suit all your training needs and include Basic Introduction to Fall Protection, Product and Service Training, as well as Customised Courses to suit specific requirements.

The training may be carried out either at one of our Training Centres or it may be done on site at your premises, subject to suitability

#### **Pro Body Harnesses**

The CheckRig Pro harness range is the latest evolution from Checkmate. Designed for simple user choice backed by medical research on the effect on the body during and post fall. For a copy of the independent medical research contact Checkmate technical support or download from website.

## PBH 1 **Principal features:**

Rear 'D' attachment point Easy to don



Lightweight Carbon steel fittings zinc plated Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection

EN 361 AS/NZS 1891

#### PBH 2



**Principal features:** Front & Rear 'D' attachment points Easy to don Lightweight Carbon steel fittings zinc plated Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection EN 361 AS/NZS 1891

#### **PBH 3**



Rear 'D' attachment point Waist belt with 2 work positioning 'D's Easy to don Lightweight Carbon steel fittings zinc plated Rapid don release for waist belt Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection

EN 361 EN 358 AS/NZS 1891

#### PBH 4

#### **Principal features:**

Front & Rear 'D' attachment points Waist belt with 2 work positioning 'D's Easy to don Lightweight Carbon steel fittings zinc plated

Rapid don release for waist belt Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection

Polvester webbing Shock absorbing rear dorsal connection

#### EN 361 EN 358 AS/NZS 1891

25

#### **Pro Body Harnesses - Riggers**

By working with professionals that demand impeccable performance, durability and comfort, we are proud to introduce our new riggers harness. It offers the user full body support, shock absorbing rear 'D', sternum attachment for abseil work and fall arrest. Large work positioning 'D's accept all accessories.



#### PBH 5

#### **Principal features:**

ear 'D' attachment point. Sternum attachment for abseil Two side work positioning 'D's Belt loops Easy to don l iahtweight Carbon steel fittings zinc plated Black powder coating option Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection



#### EN 361 EN 358 EN 813 **AS/NZS 1891** PBH 6

#### **Principal features:**

Front & Rear 'D' attachment point Integral rescue lanvard sewn to rear 'D' Easy to don Lightweight Carbon steel fittings zinc plated Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection

## EN 361 AS/NZS 1891

#### PBH 7

#### **Principal features:**

ear 'D' attachment point Hi-Vis ailet Easy to don Lightweight Carbon steel fittings zinc plated Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection

#### EN 361 AS/NZS 1891

#### **PBH 8-150N Lifejacket Harness PBH 8-275N Lifejacket Harness**

#### Principal features:

ear 'D' attachment point Front 'D' on jacket Easy to don Lightweight Carbon steel fittings zinc plated Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection

EN 361 EN 394 EN 996 EN **399 SOLAS APPROVED** 





## Harnesses

#### PBH 9



#### **Principal features:**

Rear 'D' attachment point ront 'D' attachment on lifejacket 150N Integral Lifejacket and High Vis Easy to don Lightweight

Carbon steel fittings zinc plated Stainless or composite fitting options Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection

#### EN 361 EN 394 EN 996 EN **399 SOLAS APPROVED** AS/NZS 1891

#### **PBH 10- Rapid Don Harness**

#### **Principal features:**

Front & Rear 'D' attachment point apid Don Click Lock Buckles rgonomic body pad keeps harness form Padded leg loops to reduce post fall trauma Rapid donning 5 seconds Lightweight Carbon steel fittings zinc plated Stainless fittings option Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection by tear stitch location EN 361 AS/NZS 1891

#### **PBH 11- Rapid Don Harness**

#### **Principal features:**

Front & Rear 'D' attachment point Waist belt with work positioning 'D's Rapid Don Click Lock Buckles Ergonomic body pad keeps harness form Padded leg loops to reduce post fall trauma Rapid donning 5 seconds Lightweight Carbon steel fittings zinc plated Stainless fittings option Two colour body to leg webbing Contrast colour stitch for easy inspection Polyester webbing Shock absorbing rear dorsal connection by tear stitch location



#### **FBH 5- Female Harness**

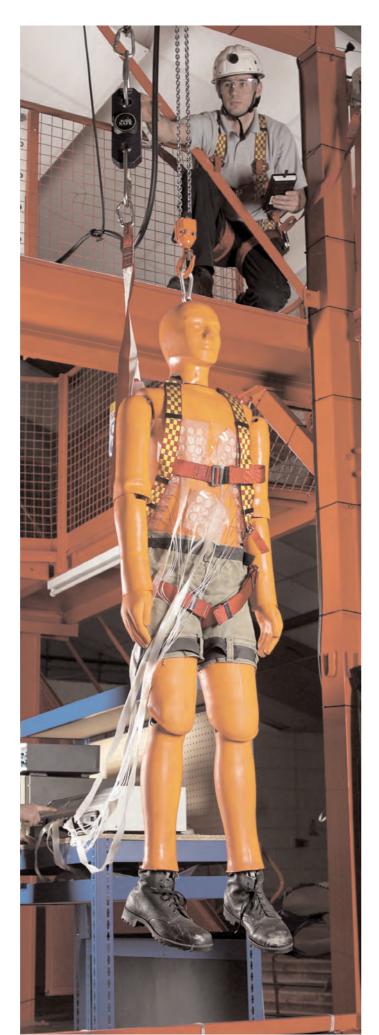
Designed for females, the harness offers good support around the hips and the design negates the need for a chest support.

EN 361 EN 358 AS/NZS 1891

#### Principal features:

Rear 'D' attachment point Waist belt with work positioning 'D's Padded leg loops to reduce post fall trauma Carbon steel fittings zinc plated or stainless Polyester webbing Shock absorbing rear dorsal connection by tear stitch location

EN 361 EN 358 AS/NZS 1891



#### **KIT 6 Escape Descender Kit**

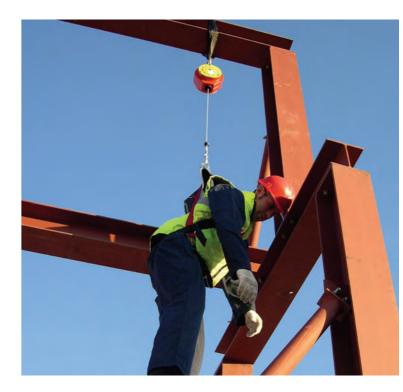
KIT 6 combines the PED3 escape descender with a PBH2 harness which has been specially adapted with quick lock buckles for rapid and secure fitting. Supplied in 10m, 15m, 20m and 30m rope lengths with all karabiners and stowed in a compact bag.

Designed specifically for warehousing and distribution with VNA trucks in mind, but suitable for escape from any height of up to 150m.

#### Includes:

PED3, 9mm Kernmantle Rope, PBH2-RD, 3xPPEH-04, Carry bag





#### **KIT 7 Rescue Kit**

Rescue kit to retrieve a casualty suspended on fall arrest equipment. Specifically designed components to lower or raise a casualty from a lanyard or fall arrest block. Remote user involvement, which prevents rescuer becoming part of the retrieval system.

Includes telescopic pole, RescueHauler, Quadra Rope device, 25m rope as standard though available in other lengths to suit specific requirements.

The equipment is versatile yet straightforward to use, employing simple, structured procedures to deal with almost any rescue situation. Full training is provided with each package, tailored exactly to each client's requirements.

**Note:** Bag shown in picture is generic. Purpose made rapid deployment pack is now manufactured to suit device.



## Harness Kits

#### KIT1 Scaffolders Kit 1

Includes: PBH2 PAL2C Carry bag

EN 361 EN355



#### KIT2 Scaffolders Kit 2

Includes: PBH2 PAL4C Carry bag



#### **KIT3 Scaffolders Kit 3**

Includes: PBH2 PAL2C RL2 AST1 Carry bag

EN 361 EN354 EN355 EN360 EN795

#### **KIT4 Multi-Purpose Kit**



Includes: PBH4, PS2, PAL2B, RL2, AST2 x 2 PPEH-06, Carry bag

#### EN 361 EN 355 EN354 EN358 EN795

#### **KIT5 Confined Space Kit**

Includes: PBH6, TR2,TWB, FAB15R, Carry bag

#### EN 361 EN360 EN 1496 EN795



#### Shock Absorbing Lanyards

Traditional tear webbing shock absorbing lanyards enable a modular design from 300mm to 2m. All pouches have back up webbing as standard.

#### SAL2 A **Shock Absorbing Lanyards**

All SAL2's are 2m shock absorbing lanyards with double action stainless steel snap hooks on pouch end.

SAL2a-c/w d/a stainless steel snap hook SAL2b-c/w 11mm steel twistlock karabine

SAL2c-c/w d/a alloy scaffold hook SAL2d-c/w steel captive eye scaffold hook

EN355

SAL3 and SAL4 to offer the user increased mobility and protection as the user has no need to disconnect from horizontal lifelines. ladders or other anchorage.

SAL3- off-set "Y" type, with d/a, s/s snap hook on pouch and two d/a alloy scaffold hooks.

SAL4

RL2

PS2

SAL3

EN355



EN355

#### **Retractable Lanyards**

A compact retractable lanyard up to 2.5m, excellent for low level working.

#### **Principal features:**

Lightweight Robust and durable in all weathers PVC cover D/A alloy snap hook on pouch Steel karabiner on device Integrated shock absorbing pouch Polyester webbing

EN 360

Pole Strap 2m

#### **Principal features:**

Lightweight alloy cam buckle Polyester webbing Wear pad D/A alloy snap hooks Can be used as fixed lanyard

EN354 EN358

23

## Lanyards



#### **Pro Absorber Lanyards**

The lightest and most compact shock absorbing lanyard to date. Energy is absorbed through a unique displacement core with the outer cover acting as a secondary back up and protection, so no shock absorbing pouch is required.

Due to the energy management, the lanyard does not suffer from any peak loads at deployment, instead it increases progressively. This reduces impact forces on the body and typical falls only reach 3.5kN on peak arrest. Available 1.3m to 2m

PAL2 B PAL3 B PAL4 B



#### **Pro Absorber Lanyard Options**

PAL2 A 2m single c/w delta link & d/a snap hook PAL2 B 2m single c/w delta link & twist lock karabiner PAL2 C 2m single c/w delta link & d/a alloy scaff hook PAL2 D 2m single c/w delta link & steel scaff hook PAL3 A 2m/1.3m off set Y c/w delta link & d/a snap hook PAL3 B 2m/1.3m off set Y c/w delta link & twist lock karabiner PAL3 C 2m/1.3m off set Y c/w delta link & d/a alloy scaff hook PAL3 D 2m/1.3m off set Y c/w delta link & steel scaff hook PAL4 A 2m equal Y c/w delta link & 2 x d/a snap hook PAL4 B 2m equal Y c/w delta link & 2 x twist lock karabiner PAL4 C 2m equal Y c/w delta link & 2 x d/a alloy scaff hook PAL4 D 2m equal Y c/w delta link & 2 x steel scaff hook

#### **Fall Arrest Blocks**

Manufactured from heat treated alloy for long term durability and service. Rapid servicing through the totally modular design reduces down time.

#### FAB5W



**The FAB5 & FAB5W** is a compact ultra lightweight fall arrest block with 5m wire or polyester webbing.

Principal features:

Lightweight heat treated alloy Robust and durable in all weathers Swivel eye Swivel shock load indicator 5mm wire rope or polyester webbing Fast brake activation normal arrest distance 300mm Micro brakes 2.5 kg EN 360 AS / NZS 1891.3:1997

#### FAB15R



**FAB15R** is a break through in technology and design. The only fall arrest block with 90 % common parts to standard FAB's. Mechanical lock drive brakes ensure no handle rotation and locks user in position instantly. Another innovative unique feature is that by use of a simple tool it allows the FAB15R to be air powered allowing rapid recovery.

#### **Principal features:**

Lightweight heat treated alloy Robust and durable in all weathers Side stowed folding handle Converts to air winch Raises and lowers Swivel shock load indicator hook Fast brake activation normal arrest distance 300mm Micro brakes

Interchangeable parts on FAB7- FAB15 9.8kg EN 360 AS / NZS 1891.3:1997

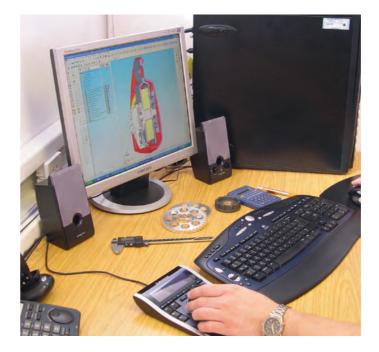
EN 1496

#### In House Design and Development

By using the latest technology in 3D design and analysis in both linear and non linear software. Delphini can engineer products bespoke to your exacting requirements.

STL models are produced directly for rapid prototyping of castings and injection mouldings, and dramatically reduce lead times for bespoke and new products.

We have found a niche in the safety market by offering products that are not off the shelf, but require modifications and client input.



#### Testing

Delphini and Checkmate operate **ISO 9001:2000** for the design, test and manufacture of all its products. We are proud of our extensive test facility boasting two dynamic test towers, 75 tonne horizontal tensile machine, synthetic abrasion tester and bespoke anchorage for large scale testing projects such as horizontal lifelines.



#### FAB7 & FAB10



**FAB7 & FAB10** (7m) and FAB10 (10m) fall arrest blocks are a revolution in modular cassette style build and servicing.

#### Principal features:

Lightweight heat treated alloy Robust and durable in all weathers Swivel shock load indicator hook Galvanised steel wire rope lifeline Polyester webbing on FAB7W Fast brake activation normal arrest distance 300mm Micro brakes Interchangeable parts on FAB7- FAB15 FAB10 - 7.5kg EN 360 AS / NZS 1891.3:1997

#### FAB12W FAB15 & FAB18



FAB12W (12m webbing) FAB15 & FAB18

(15m) and (18m) wire rope fall arrest blocks from the same family as FAB7 and FAB10 allowing many common parts.

#### Principal features:

Lightweight heat treated alloy Robust and durable in all weathers Swivel shock load indicator hook Galvanised steel wire rope lifeline Polyester webbing on FAB12W Fast brake activation normal arrest distance 300mm Micro brakes Interchangeable parts on FAB7- FAB15 FAB15 - 8.5kg FAB18 - 8.75 kg EN 360 AS / NZS 1891.3:1997



#### **Bespoke Solutions**

Delphini Safety welcomes challenging design briefs from clients. The two examples shown below serve to highlight how we are able to design systems that satisfy the demands of health and safety legislation yet are sympathetic to the fabric of the building.

The all stainless steel construction walkway shown below spans over 5 metres of a historic bell tower and is fixed using specially designed anti vibration rubber pads.

The walkways had to be manufactured in modular sections due to tight access limitations and physical weight. Once delivered to site our installation team used the PED5 work and rescue system combined with the PBH5 riggers harness to position themselves and bolt the walkways together.



A specially designed easy-to-release gas strut controlled lifting mechanism enabling a 300 kg octagonal lead covered hatch to be lifted by one person, installed by our engineers on the Tower of London to allow inspection and access. Improved roof access was also provided by installing specially shaped walkways designed to match the octagonal hatch and fixed with clamps to the lead rolls to avoid penetrating the roof.



Delphini Safety utilise a wealth of experience in the design, fabrication and installation of purpose made walkways and ladders.

Where possible we utilise standard designs and adapt to suit your particular application.

Often roof structures or buildings require a more tailored approach and our team offers site measuring, design advice, CAD Design and structural analysis to deliver the complete solution.

Walkways can be designed and fitted to all manner of structures allowing safe access whilst protecting the structure itself.

Safe access is normally provided to the roof via internal or external ladders. Delphini do not promote the use of safety hoops as they offer the user very little protection in the event of a fall. Instead we recommend that a vertical fall protection system is mounted on the ladder for total security.

Consult us for technical advice to ensure compatibility with structure and system prior to any installation.

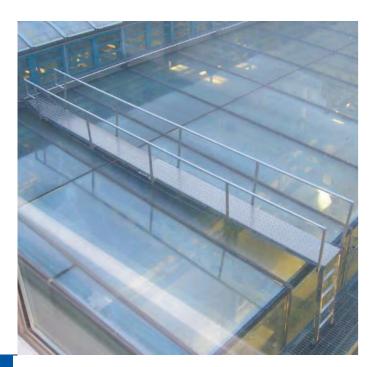
Examples of our designed walkways and ladders are shown here.



Fig 3. Greenwich University Purpose deigned alloy walkway on moving track over glass roof.

Fig 1.

**Greenwich University** Purpose deigned alloy walkway on moving track over glass roof with integrated access ladder.





Industrial Warehouse Galvanised steel access ladder





#### PED5

The PED5 is used for confined space or work and rescue tasks. The device can work with a bosuns chair, harness or rescue sling. The kernmantle rope runs over a top and bottom pulley and the user can either ascend or descend independent of any other person, control being maintained by the ascender which can be either right or left handed. In rescue, or as an assist, another person can help raise or lower the user with an ascender, independent of the person in the chair or harness.

#### **Principal features:**

Lightweight head and bottom pulley 2.9kg Compact Self contained in bag Up to 50m raise and lower 9mm low stretch kernmantle rope All allov construction Excellent heat dissipation during prolonged use Stop at any point Easy to use 1:1, 2:1, 3:1 and 4:1 roping options Maximum person weight 150kg (for greater weight refer to Checkmate) Powder coated

EN341 Type A

#### BC- Bosuns Chair PVC and webbing with ply seat

#### **BCGRP- Bosun's Chair Glass Reinforced Fibre**

The bosun's chair is ideal for abseil and work positioning applications and offers the user greater comfort and freedom of movement than in traditional rigging harnesses.



#### PED3

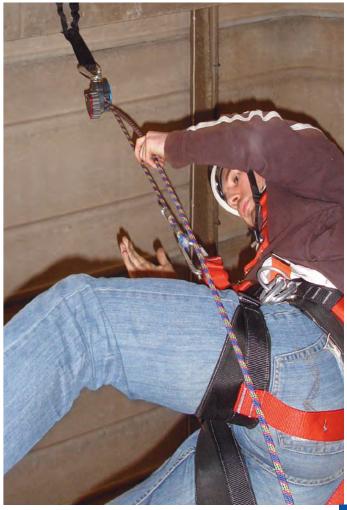
The PED3 is used in conjunction with an escape harness or rescue sling. The PED3 is the smallest automatic abseil and escape device in the world. The unit is robust in all weathers and the rope entry and exit is separated from all internals to prevent dirt ingress. The user may stop at any point with little force being applied to the ascending rope. Also suitable for multiple user evacuation.

#### **Principal features:**

Lightweight only 1.1kg Compact Self contained in bag Up to 150m lower 9mm low stretch kernmantle rope Excellent heat dissipation during prolonged use Easy to use Maximum person weight 150kg (for greater weight refer to Checkmate) Powder coated

EN341





#### **CheckPod - Davit**

The Checkmate davit is a lightweight steel construction with a range of base sockets and frames for unlimited configurations. Ideal as a portable anchorage for confined entry work or rescue systems.



## Principal Features

Steel construction Height 2.1m Integral pulley Use with winch or fall arrest block Back up anchorage Free standing frame Range of base mounting sockets 100mm adjustable swivel feet with anti slip rubber pads EN 795

#### **CheckPod** - Tripod

The Checkmate tripod is a light weight alloy construction fully adjustable from 1.3m to 2.5m high. A single pulley and eyebolt is fitted as standard with options for up to 3 pulleys and up to 3 evebolt anchors.

Used for confined entry and where anchorages are limited.





TWB



Principal Features

All alloy construction Telescopic height adjustable legs Height range from 1.3m to 2.5m Up to 3 pulleys Up to 3 eye bolt attachments Bracket for attachment of winch or geared recovery block Locking pins for legs captivated by wire lanyard Stainless steel pins 100mm adjustable swivel feet with anti slip rubber pads 12.35 kg EN 795 (Tested to over 20kN)

#### **KeeGuard Rail System**

#### **KeeGuard Options**

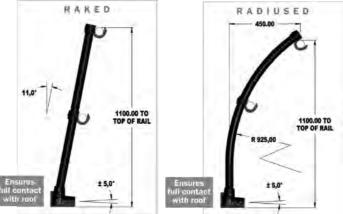
The KeeGuard system is the cost effective answer to Roof Edge Protection.

The KeeGuard system now features our NEW rail fitting, allowing the guardrail simply to be placed into the saddle of the fitting rather than being fed through each upright.

The system can be assembled up to twice as fast as conventional systems, thus SAVING you TIME and MONEY.









## Principal Features

Choice of styles of upright Does not penetrate the roof membrane Allows edge access, whether there is a parapet or not Robust and resistant to mechanical and weather damage, including frost The base plates and uprights can be raised easily to facilitate roof repairs Offers an integral means for toeboard fixing NEW rail fitting slashes installation costs Choice of three typical styles of upright shown opposite D Return on end upright RAL colour powder coated if required Minimal tools, no threading or welding required

## Compliant with EN14122

#### Kee Anchor- Dead Weight Anchor System

The Kee Anchor System is designed for use on roofs where there are no permanent guardrails, such as Kee Guard, or other anchor devices, in order to allow safe freedom of movement around the roof space.

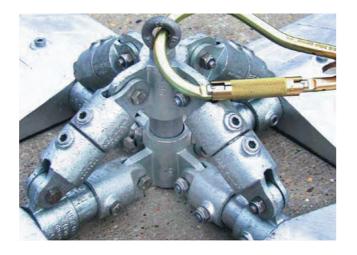
The Kee Anchor system offers the solution to the problem of minimal time maintenance operations for those jobs requiring occasional roof access.

The system's modular components have been designed for ease of assembly on site and for transporting the system to site. Another bonus of the Kee Anchor system is that the weights are interchangeable with the Kee Guard system, thus ensuring safety whilst fitting a Kee Guard system and ease of disassembly as the weights can be integrated into the Kee Guard system.

For added safety all of the weights that come into contact with the roof are fitted with protective anti-slip rubber pads.

The Kee Anchor system offers a low maintenance, reliable and simple to assemble solution to working at heights requiring no drilling, special anchorage or penetration of the roof membrane.

All components are zinc coated to ensure long lasting corrosion resistance and the grubscrews used in the system are case hardened and feature KeeKoat protection.







There is a legal requirement to ensure a safe and efficient maintenance regime for people working at heights. Without a correctly tested and installed system you can be held personally responsible for the safety of your personnel.

The Kee Anchor system is a modular dead weight anchor, for use with Personal Protection Equipment conforming to the latest EU regulations and can be used on mineral felt and single ply membrane – be it wet or dry!

## Principal Features

The Kee Anchor system can be used on roofs up to a 5 degree slope

Multi purpose weights can be used with the KeeGuard roof edge protection system

Suitable for use on Mineral Felt and Single Plymembrane roof surfaces

Corrosion resistant for long lasting service

Easy to assemble

Suitable for use with lanyard's and Energy Absorption devices conforming to EN354, EN355 and EN 360

EN795:1996/Amendment A1: Dec 2000 (equivalent to pr EN 795:2003 class E), BS 7883 class E and ISO 14567

#### CheckLine Temporary LifeLine System

A simple to install temporary fibre rope lifeline system that can span between fixed anchorage points and provide a safe horizontal anchorage for multiple users.

The device is simple to install, easily assembled by one person and can safely arrest up to 4 users.

See technical information and user instructions for clarification.

The configuration of the HLL1 system is as follows: Up to 25m of 16mm rope c/w a swivel socket to reduce rope twist.

The RVT (Rope Vice Tensioner) is used to tension and lock system. System can be tightened by hand or additional tension may be applied with a 24mm spanner, the pulley slips when MAX tension is achieved.

The lightweight device is manufactured from high grade alloy and to keep moving parts free running the pulley, cam and swivel socket are high tensile brass. Pulley and cam are coated for enhanced protection and visibility.

For construction and other applications Checkmate also offer its stanchion to provide single or multi-span protection. Simply run lines between stanchions and use a Y type lanyard to remain attached at all times.

See page 10 for further details on stanchion.





## Principal Features

16mm double braid rope Rope is low stretch Up to 25m span Up to 4 persons per system Easy to install and take down with quick release arm Lightweight in own purpose made bag Easy to tension simply pull dead rope until taut. Flats on shaft allow a spanner to be used. Pulley is designed to slip so cannot be over tightened Powder coated TLLS with swivel to remove twist 4950kg rope strength TLLS 0.65kg Rope vice tensioner 1.6kg EN795 AS / NZS 1891.2:2001

HLL1 Standard kit 25m rope, RVT, swivel socket, bag and 2 x karabiners

#### **HLL1W Webbing Temporary Lifeline**

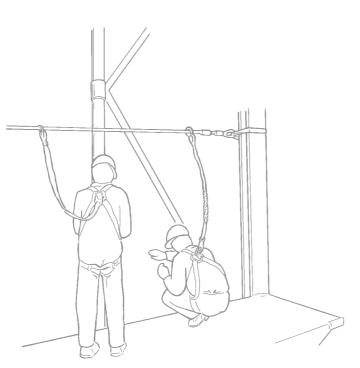
A simple to install webbing system that can span between fixed anchorage points and provide a safe horizontal anchorage for up to two users.

For construction and other applications Checkmate also offer its stanchion to provide singe or multi-span protection. Simply run lines between stanchions and use a 'Y' type lanyard to remain attached at all times.

#### **HLL1W Options**

**HLL1W** 20m webbing, tensioner and bag. (plain ends) **HLL1WK** 20m webbing, tensioner, bag and 2 x swivel karabiner **HLL1WS** 20m webbing, tensioner, bag and 2 x alloy scaff hook

See page 10 for further details on stanchion.





HLL1WS



## Principal Features

25mm Polyester Webbing Webbing is low stretch

Up to 20m span

Up to 2 persons per system

Easy to install and take down with simple ratchet tensioner

Lightweight in purpose made bag

Short handle ratchet ensures users can not over tighten

Zinc plated

HLL1WK- Has swivel Karabiners to remove webbing twist

4000kg webbing strength

HLL1W 1.3kg

#### EN795 AS / NZS 1891.2:2001

HLL1W Standard kit 20m Webbing, Ratchet Tensioner and Kit Bag.

#### CheckTrack

#### Introduction

Checkmate's **CheckTrack** system is a rigid horizontal enclosed track system which employs a mobile anchorage device, allowing a person/persons to move freely and safely without the need to unhook/disconnect from the system.

The system comprises a fixed track installation and a mobile travelling trolley unit to be used in conjunction with personal protective equipment.

#### Installation

Checkmate offer a comprehensive installation service and we would always recommend using our own qualified engineers, or alternatively one of our highly qualified approved installers.

When considering an installation, it is necessary to obtain full details of the site and the installation position. A site visit or copies of structural drawings will be needed to determine the extent of the installation. Checkmate offer this service as part of our package.

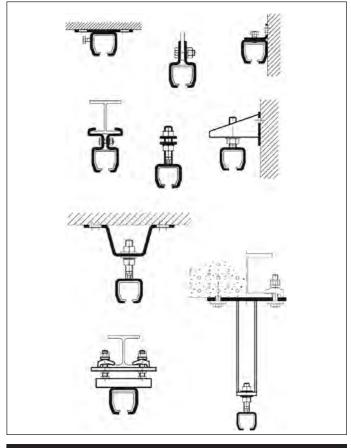
#### System Components

The **CheckTrack** system components are produced using mild steel and as standard are supplied in either a plain or zinc plated finish, however hot dip galvanising, powder coating, stainless steel and many other finishes can be supplied on request.

The components detailed in this brochure are a selection of the most common items used. A vast range of additional components are also available should these not suit specific requirements. In addition Checkmate also offer a bespoke design service for special equipment. Utilising our in-house design department, our ability to provide solutions is second to none.



#### **Typical Configurations**



## Principal Features

#### Mounting Centres

## Restraint - Up to 2 persons

400 Profile @ 2.0m centres Max

Fall Arrest - 1 Person (Design Load 10kN) 400 Profile @ 1.2m centres Max 500 Profile @ 2.0m centres Max 600 Profile @ 3.0m centres Max

Fall Arrest - 2 Person (Design Load 11kN)500 Profile @ 1.75m centres Max600 Profile @ 2.75m centres Max

Fall Arrest - 2 Person (Design Load 12kN) 500 Profile @ 1.50m centres Max 600 Profile @ 2.50m centres Max

#### EN 795 Class D

#### TwinLine

A twin wire horizontal lifeline that is permanently installed and allows uninhibited movement around any structure. There is no need to disconnect at intermediate fixings as the trolley will glide over them using a twin taper per line guidance system that ensures a smooth action.



**End Bracket** 

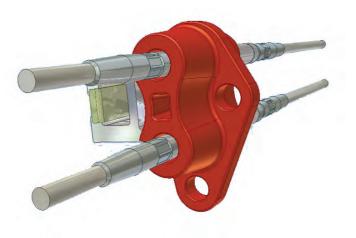


Intermediate Bracket



Corner Brackets with bespoke mounting plate





## Principal Features

Stainless steel trolley Alloy intermediates anodised Trolley powder coated Stainless steel tapers and spacers Stainless steel end plates Single M12 bolt to secure

intermediates

Twin 8mm stainless steel wire rope

Wire pre tensioned between fixings reducing sag and minimising ground clearance

Shock absorbing guides at each intermediate that are designed to give if a fall generates high forces End fixings have a forgiving swage Up to 9m spans Wire to rail for zero sag

EN 795 Class C

### CheckAnchor

#### Temporary LifeLine Anchorage

The Alloy Stanchion is a light weight portable anchorage system for use with Checkmate's temporary lifeline systems.

It clamps directly to steel beams up to 24mm in thickness. The 4 Stainless steel grub screws positioned on the top of the flange bite in to the material surface when 2 x M16 bolts are torqued up.

The system is ideal for steel erection and large construction projects where anchorages are limited. By connecting a number together the LifeLines can be used to span unlimited lengths. By the use of a 'Y' type lanyard cross-over is always safe.

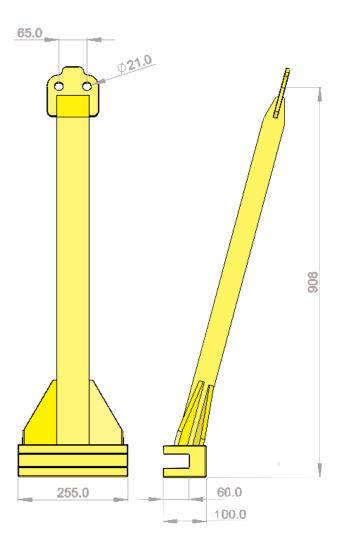
#### Anchorage Strop - AST & ASTW

 $\ensuremath{\text{AST}}$  - 25mm webbing anchor loop in a range of lengths complete with wear pad.

 $\ensuremath{\text{ASTW}}$  - 6mm dia galvanised steel wire rope sheathed in 15mm clear plastic tube.



Temporary Systems



## Principal Features

All alloy construction Powder coated Stainless steel bolts Lightweight 9.5kg Two anchorage holes Up to 24mm flange thickness Simple to install Portable

## EN 795

#### **ARG** Automatic Rope Grab and Kits

#### Rope Grabs

For vertical and inclinded fall arrest protection, automatic type Rope Grabs are available and are ideal for ladder climbing or on sloping roofs. May also be used as a back up system to the main suspension or lifeline. Suitable for use on 11mm and 12mm diameter kernmantle fibre rope.

#### Options

ARG Auto rope grab **ARG-5** Auto rope grab c/w 5m 11mm rope & 2 x karabiners ARG-10 Auto rope grab c/w 10m 11mm rope & 2 x karabiners ARG-15 Auto rope grab c/w 15m 11mm rope & 2 x karabiners

#### **ARGC** Automatic Rope Grab Cable

Used for permanently installed vertical fall protection. The ARGC systems are designed to suit specific structures.

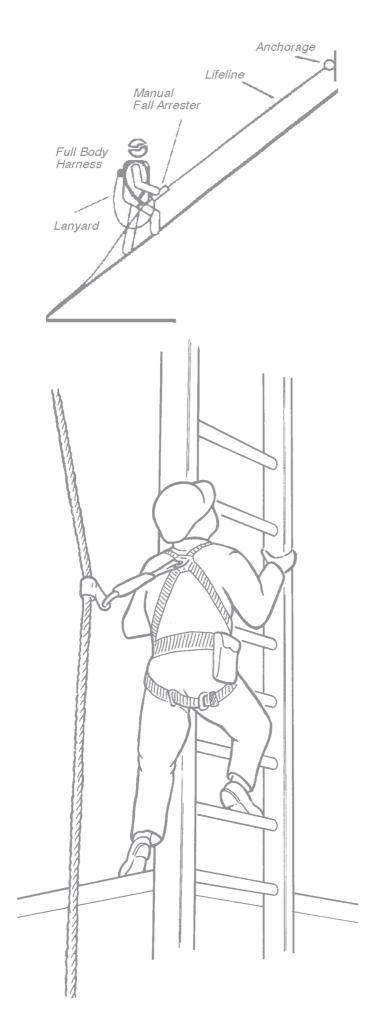
ARG-20 Auto rope grab c/w 20m 11mm rope & 2 x karabiners

For further infomation please contact Checkmate with your full systems enquiry.

ARGC is sold seperatley if required. (Suits 8mm dia 6x19 Stainless Cable)









## Permanent Lifeline System



**Trolley Options** Standard - SLL-116 Removable - SLL-117 ACS - SLL-118

## Principal Features

Stainless steel construction, with zinc plated and powder coated base plates. Stainless steel options

3 Trolley options including Patented ACS (Active Cam System) ACS trolley for inclined roofs

Spans range from 6m to 12m depending on the structure

Range of fixing posts to suit brick, concrete, steel or composite roofing, standing seam, PVC and Bitumen flat roofs

TopFix posts are energy absorbing via special rubber dampers.

In-line shock absorber and loadcell

Installed using 12Volt lightweight portable crimper

Internal and External corners with an open slot for ease of cable pull through. Supported by tubular stays to eliminate corner deflection

Fast fix Mega Stitch screws to reduce install time for composite roofs

Energy absorbing post removable from base plate after a fall, leaving roof panel intact

8mm 7x7 construction s/s wire rope Unlimited bracket configurations to cover all installations

Complies with EN 795 Class A & C AS / NZS 1891.2: 2001

#### **CheckLine Permanent LifeLine System**

CheckLine is technologically advanced to offer the user total security and freedom of movement.

This next generation system boasts many novel features including the unique patented ACS trolley *(for inclined roofs and structures).* Removable TopFix posts allow simple installation and rapid repair in the event of a fall.

The In-line loadcell measures tension during and after installation, ensuring the system is at the designed pre tension. This is critical when installing on fragile structures and over long spans.

In-line dampers are used for steel, brick and concrete fixings. This reduces peak end load by around 40% protecting extremity anchors and structures in the event of a fall.

Connection to the system is simple via either the entry  $\not/$  exit gate for standard and ACS trolley, or at any point with the removable trolley.

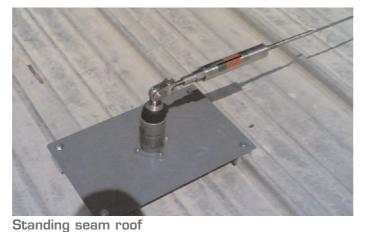
By designing a totally modular 'Plug & Play' system Checkmate have given installers freedom to design LifeLines from simple straight runs to complex shapes without any compromise.

Lightweight battery powered crimpers ensure accurate terminations, speed up installations and reduces tool carrying weight.

# CheckLine



Flat concrete bitumen roof



#### Curved PVC coated roof



#### **Vertical Rail**

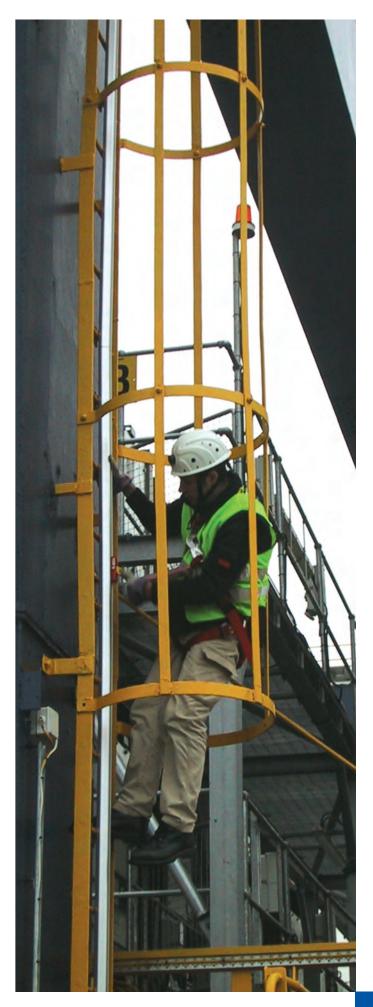
A simple to install safety solution for all your ladder and vertical access situations. The lightweight trolley has a gravity and dynamic brake with easy glide action for snag free movement. The extruded alloy rail is designed with a 'T' slot in the back to assist installation, making the accuracy of anchorage fitting unimpeded. The use of slipping joints allows for connection to dissimilar metals allowing for thermal expansion.



## Principal Features

Rail lengths 4m as standard Rail weight 3.5kg/m Rail jointed by 2 dowel studs End stops at top and bottom optional Lightweight trolley with integrated shock absorber and karabiner Trolley weight 0.8kg (including shock absorber and hook) Brake pad easily replaced Trolley chromated and powder coated Bolts fed onto rail prior to connection

EN353-1 AS / NZS 1891.3:1997



## CheckRing Removable Eyebolt System

The Checkmate removable eyebolt is a simple to install anchorage that can be removed by a quick double action method. Ensures the user can not accidentally disconnect without two separate movements.

Due to the nature of the design the eyebolt can spin freely through 360 degrees. This guarantees the eyebolt is in a positive strength plain and not being stressed.

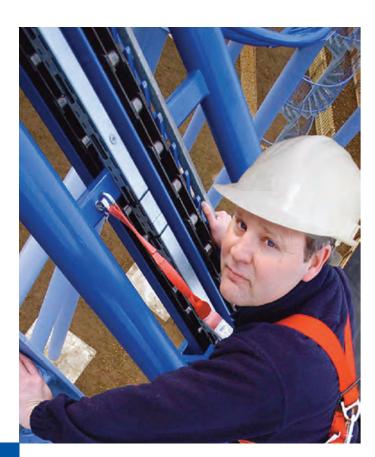
The CheckRing system is ideal for installations where a large number of single point anchors are required and not detracting from the buildings finish is key. The socket is fitted with an end cap when not in use. Leaving a flush unobtrusive finish particularly in hotels and office blocks.

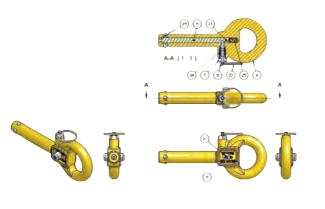
A range of anchor sockets have been designed to cover all applications including.

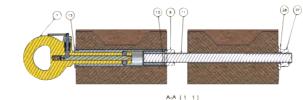
#### Brick and Concrete



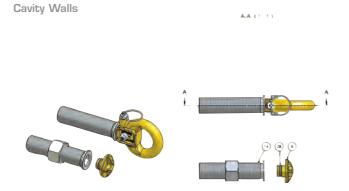












Brick, Concrete and Steel

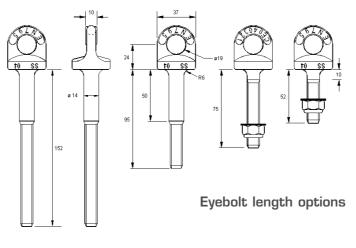
## Principal Features

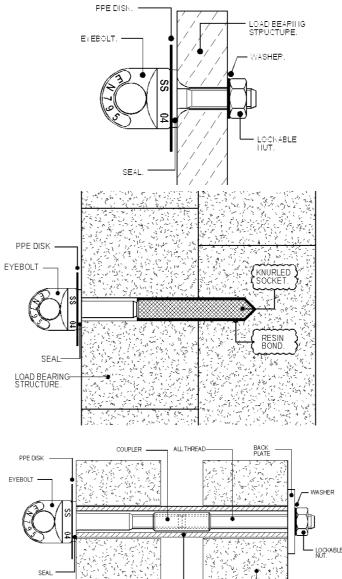
All stainless steel construction Double action for safety Discreet and unobtrusive Colour coded blanking caps Small drill hole Nom. 26mm 360 degree rotation Simple release, pull and slide Complete range of fixing sockets Tested to 15kN

EN 795 Class A1

#### **CheckAnchor- Permanent Eyebolts**

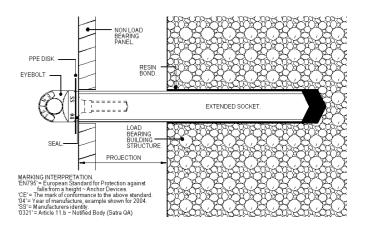
Single point single user anchor device for permanent installation in to new and existing buildings or structures. For use with Personal Protective Equipment to protect against falls from height and for no other purpose. Suitable for window cleaners and maintenance workers.

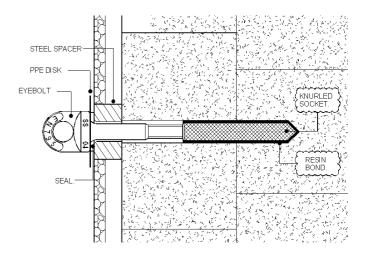




COMPRESSIO

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## Principal Features

Suitable for use in load bearing brick, concrete and steel

Galvanised, Stainless Steel and White powder coated finishes available

Individually proof tested to 10kN

Full range type tested

Class A1 anchor device to EN795 and BS 7883

**CE** marked

LOAD BEARING STRUCTURE

## EN 795 Class A1