

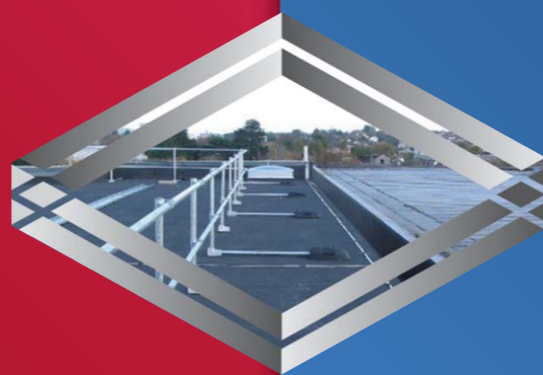
**DEFENDER**<sup>TM</sup>  
ROOF EDGE PROTECTION  
SYSTEMS



**the company** Access Technologies have been producing handrail systems since 1995 selling products throughout the world from China to Kazakhstan to Europe to the USA.

**responsibility** Falls from height are the most common cause of serious injury and the latest HSE report shows that during 2007, 45 workers died and 3750 were seriously injured following falls from height in the workplace. With a need to clean gutters, fume extract ducting and windows as well as an increasing requirement for maintaining and installing air conditioning plant, telecommunications and CCTV equipment building owners have a responsibility to provide a safe working environment for their employees and sub-contractors.

**after sales** Access Technologies provide an Operation & Maintenance Manual with every installation, this warns about system misuse, instructions on installation and includes a formal inspection log.



**the systems** All DEFENDER ROOF EDGE PROTECTION systems are freestanding with no requirement for fixings or drilling and subsequently no repair to the roof membrane, they are suitable for flat or nearly flat roofs, maximum pitch 3°. The systems satisfy the requirements of BS EN ISO 14122 part 3 Safety of Machinery - Permanent means of access to machinery - stair ways, stepladders and guard rails and are supported by CERAM certification.

All DEFENDER ROOF EDGE PROTECTION systems operate on a counterbalance principle using curved PVC counterweights as the main component. A galvanised malleable iron foot with a protective rubber base supports the handrail post, this includes an integral toeplate facility which is a fundamental requirement if there is no perimeter edge upstand.

All DEFENDER ROOF EDGE PROTECTION systems include our cradle fittings, this is a major cost saver, allowing the handrail tube to be dropped into place instead of being fed through several fittings as with other systems.

All DEFENDER ROOF EDGE PROTECTION systems are designed to withstand a maximum horizontal load applied perpendicular to the top rail of 300Nm or a single point load of 600Nm.

## SYSTEM BENEFITS

- The system is effectively maintenance free with hot dip galvanised malleable iron fittings to BS EN ISO 1461. PVC counterweights and hot dip galvanised tube
- For use on asphalt, coated steel sheeted or concrete mineral felt roofs
- Rapid installation / No special tools required  
No on site welding or bending required
- Base fitting allows option of installing uprights up to 10° from vertical.  
Bolt on toeplate facility to comply with HSG 33

## DEFENDER<sup>TM</sup> ROOF EDGE PROTECTION

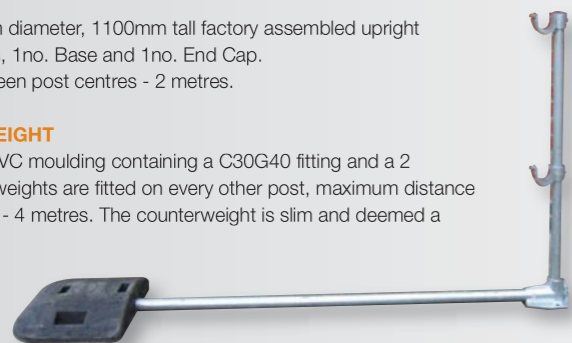


### RE00G40 POST

The RE00G40 is a 48mm diameter, 1100mm tall factory assembled upright comprising: 2no. Cradles, 1no. Base and 1no. End Cap. Maximum distance between post centres - 2 metres.

### RE11P40 COUNTERWEIGHT

RE11P40 is a recycled PVC moulding containing a C30G40 fitting and a 2 metre tube. The counterweights are fitted on every other post, maximum distance between counterweights - 4 metres. The counterweight is slim and deemed a low trip hazard.



CERAM Test Report BT0777TJB - October 2007

A simple and cost effective way of protecting roof edges

## DEFENDER<sup>TM</sup> ROOF EDGE PROTECTION



### RE00G40 POST

The RE00G40 is a 48mm diameter, 1100mm tall factory assembled upright comprising: 2no. Cradles, 1no. Base and 1no. End Cap. Maximum distance between post centres - 2 metres.

### RE11P40SS COUNTERWEIGHT

RE11P40SS is a recycled PVC moulding containing a C30G40 fitting and a 1 metre tube. The counterweights are fitted on every post, maximum distance between counterweights - 2 metres. The counterweight is slim and deemed a low trip hazard.



CERAM Test Report BT0777TJB - October 2007

Shorter length counterweight tubes, enables installation in restricted roof areas

## DEFENDER PLUS<sup>TM</sup> ROOF EDGE PROTECTION



### RE00G40SS POST

The RE00G40SS is a 48mm diameter, 1100mm high curved factory assembled upright comprising: 3no. Cradles, 1no. Base and 1no. End Cap. Maximum distance between post centres - 2 metres.

### RE11P40SS COUNTERWEIGHT

RE11P40SS is a recycled PVC moulding containing a C30G40 fitting and a 1 metre tube. The counterweights are fitted on every other post, maximum distance between counterweights - 4 metres. The counterweight is slim and deemed a low trip hazard.



CERAM Test Report BT07505TJB - August 2007

Aesthetically pleasing with 3 rails for added security and shorter length counterweight tubes enabling installation in restricted roof areas.

## COMPONENTS USED ON ALL SYSTEMS



1.

### 1. RE12P40 RUN END COUNTERWEIGHT

RE12P40 is a run-end counterweight assembly used on all systems with a 'free end'. Containing 2no recycled PVC mouldings, 2no C30G40 fittings, 1no C03G40 fitting, 1no solid 690mm bar and 1no 2 metre tube. This part is supplied loose for site assembly.

2.



### 2. C00G40 SLEEVE JOINT

C00G40 are used to connect adjoining handrail sections together. These should not be used in the same bay.

3.



### 3. C02G40 90° ELBOW

C02G40 are used to change direction at 90° without bending the tube or to form D return end.

4.



### 4. C05G40 VARIABLE ELBOW

C05G40 are used to change directions other than at 90° without bending the tube.

5.

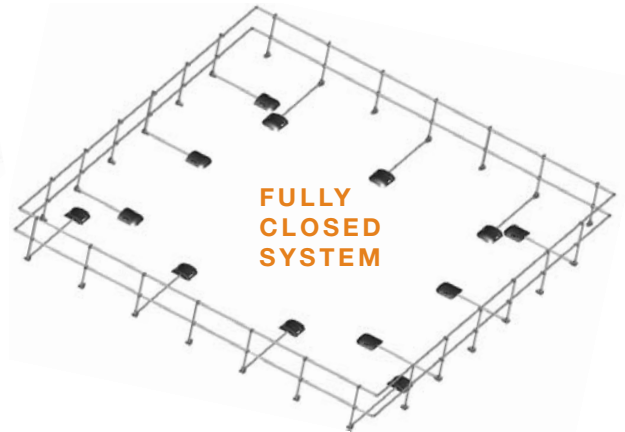
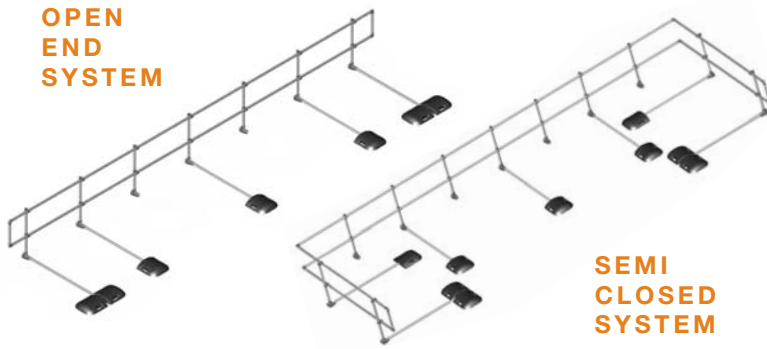


### 5. C11G40 WALL FLANGE

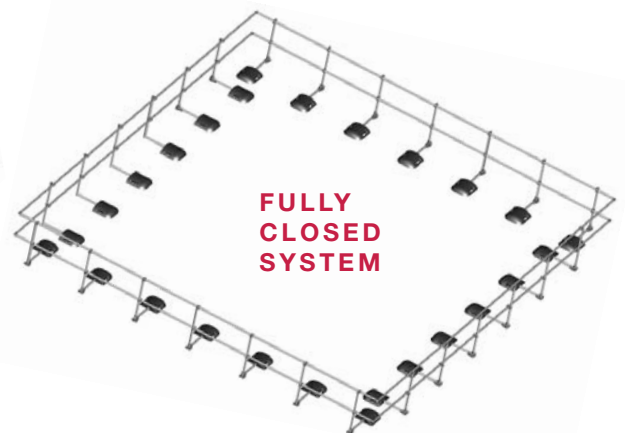
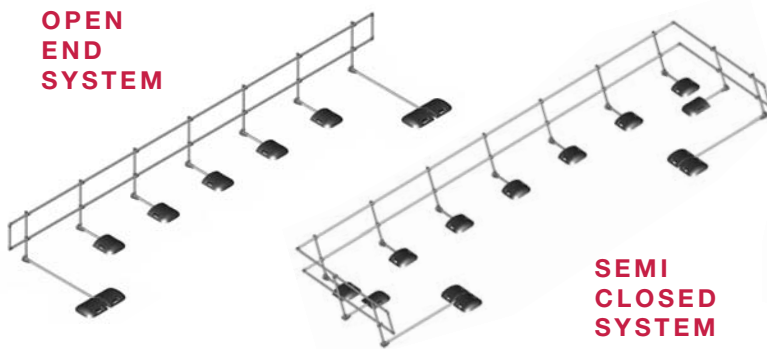
C11G40 wall flanges are used to fix the wall to the end of the crossrails to terminate a run of Defender.

# TYPICAL LAYOUTS

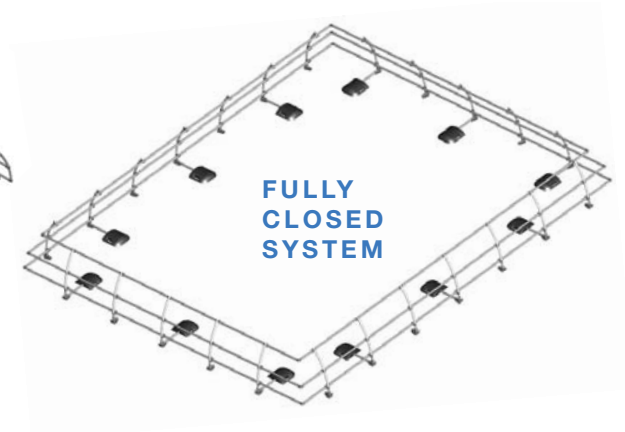
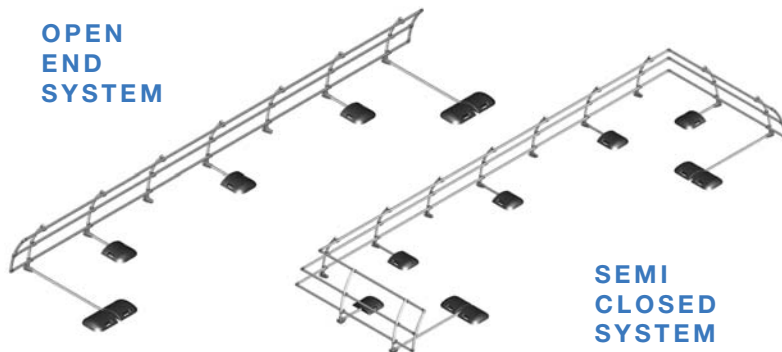
## Economy



## Standard



## Plus



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