



**ITAB**<sup>mk</sup>

LOSS PREVENTION

## Case Study

### The Trolley Retention & Management Market

Available, are three wheel based trolley retention systems. Two were designed in the USA where retailing is predominately mall based with shared parking lots. In order to cover considerable areas of egress they designed an RF (Radio Frequency) system, where the braking wheels would operate when they received a signal from a cable which circles the site. The third was designed in the UK where many retailers create focussed exits and for them a innovative triggering system was developed.

The advantages and costs of the different systems really start from this point where the systems functions follow the form of the retail environment they were created for. Typically, in the USA they have a high unit price and therefore only one is fitted per trolley. Like many electronic solutions they appear to offer more but as



with many sophisticated designs there is little fail safe, if problems should occur.

If the triggering cable breaks for example then the whole system can fail. If the battery/power fails on the device then the unit fails to brake. Also, as a single wheel braking system, they can easily be dragged by someone trying to leave with the trolley. In one instance this leads to flat-spotting on parts of the wheel and reduces its life and value thereafter. Other issues can be that the assembly suffers from string and other debris becoming entangled and stopping the mechanism from working. Typically costs are similar for both the US systems at £30+ per wheel - their costs are equivalent to at least two thirds of the trolley fleet. If therefore one is lost then the asset 'at risk' is much higher. Also being an electronic system there are considerable running and maintenance costs.

Radlok is a much simpler system – the unique triggering system will last for years without additional power or maintenance. The main criticism of Radlok is that the device can be lifted over the triggering system and removed that way. While this is certainly a risk, it is not a common occurrence. However, if this proves to be a problem at the exit, we simply put in more lines of triggering system in place so that the lifting option becomes very hard work. Due to the simpler mechanical nature of Radlok the costs are typically 25-40% less than the other systems to buy and 50% less to maintain. It is also true that Radlok is the more effective braking system after activation and as two Radloks are fitted, dragging the trolley is much harder.

## Radlok Case Study

Supermarket Retailer  
– 24 Trinity Street, Coventry

Preventing abandoned trolleys has been a growing issue since 1991 when environmental legislation was passed putting the responsibility of 'off site' trolleys onto the retail sector. Further governmental changes have occurred, with the Clean Neighbourhoods and Environmental Bill which came into full effect by Spring 2006, extending and deepening in corporate responsibility for these environmental issues.

This is a key factor in the way retailers will need to consider this problem. Until now retailers have primarily considered the payback that a system might offer against the annual losses currently being experienced by a store. However, now it seems that the authorities are going to hold companies more responsible for trolleys stolen from the store if they are found in environmentally sensitive areas. The new legislation clearly anticipated that retailers could do more to prevent trolleys from escaping and now hold them responsible. Therefore as long as the retailer shows that it has now taken reasonable efforts (i.e. employed a scheme with some credibility like Radlok) then they should be able to avoid prosecution.

For example, when we surveyed this Coventry city centre store, it was made apparent that the loss from this site alone was 30 trolleys every month, costing in the region of £1.5k per month or £18k annually. We would recommend that to protect this store would cost as little as £1.4k, so in less than one month you would have recouped this investment

### Benefits to the Radlok System

- Rapid Return on Investment
- Low Maintenance & Servicing Costs
- Simple Mechanical Design

- Eco-friendly – uses no power & protects against abandoned trolleys causing environmental damage
- Compatible with all trolleys

### Why Trolley Retention is Important.

A trolley in a river or canal, over time, can form a very effective dam, collecting passing debris and detritus increases the risk of flooding to the surrounding area. Posed with these problems the Government has introduced this legislation specifically targeting shopping/luggage trolleys. The legislation gives Local Authorities the power to remove and impound trolleys which find themselves abandoned. Any of these unintended uses, cost the retailer vast sums of money having to pay to replace and repair units in addition to affecting trade. The environment, however, faces far greater problems. If a trolley finds its way into a water-



way it has real potential to cause serious damage to entire ecosystems.

The owner/retailer can then be charged for the storage and fines can be imposed. This has a huge potential of costing retailers thousands of pounds in charges as well as the capital loss of assets. This being said ITABmk saw over 100% increase in sales of its trolley retention system Radlok.

A major retailer installed the system in over 90 stores last year alone and is set to install in the region of 150 systems over next 12 months. Following closely are many of the other major retailers. Several other large retailers, having been customers for many years, are expressing new interest with a view to bring their worst performing stores in line with the new legislation and are looking to buy Radlok as their default retention system, having seen the benefits it holds over competitive systems. Other retailers, who use deposit locks, are also moving towards physical retention methods as pound locks are not seen as customer-friendly.

A deposit lock affects 100% of your customers when only 0.002% of your customer will take a trolley. Furthermore, a pound is comparatively low in value to the cost of a taxi or the benefit of not having to carry bags. In many of these cases Radlok is being chosen as the preferred method.

This being said, this year is looking likely to be our biggest year of sales and Radlok is the market leader in the UK, if not in Europe as a whole. Whilst this trend looks good for the coming years the next generation is already being developed. The new system, 'CartCop', allows retailers to lock the wheels at exit points in much the same way as the Radlok, however the CartCop will reset its self once it is brought back within the grounds of the store. Perhaps the biggest difference will be its

ability to lock if a customer fails to pay for shopping known as "Walk Outs", a growing problem amongst retailers.



## 1. Radlok

Utilising a patented mechanical braking system, Radlok allows free use of trolleys throughout the store and car park but prevents them from being taken across predetermined boundaries. Easily reset by staff, this system not only protects you from the cost of fines, collection teams and new trolleys but also ensures that there are enough trolleys available for legitimate users. Radlok is currently in use across five continents. Radlok is a mechanical system which is low cost and offers the greatest braking force. It has no power costs making it a very eco friendly solution combined with very low maintenance. Retrofitted to the normal wheel, which means that the Radlok can be replaced without affecting the performance of the trolley castor and fits almost all castors used in the UK & Europe, including travelator wheels. Radlok delivers a rapid return on investment. Once triggered a brake foot is released which acts on the ground making it very hard to push in any one linear direction. Radloks can only be reset with a special key which will be held by trolley return staff /managers.

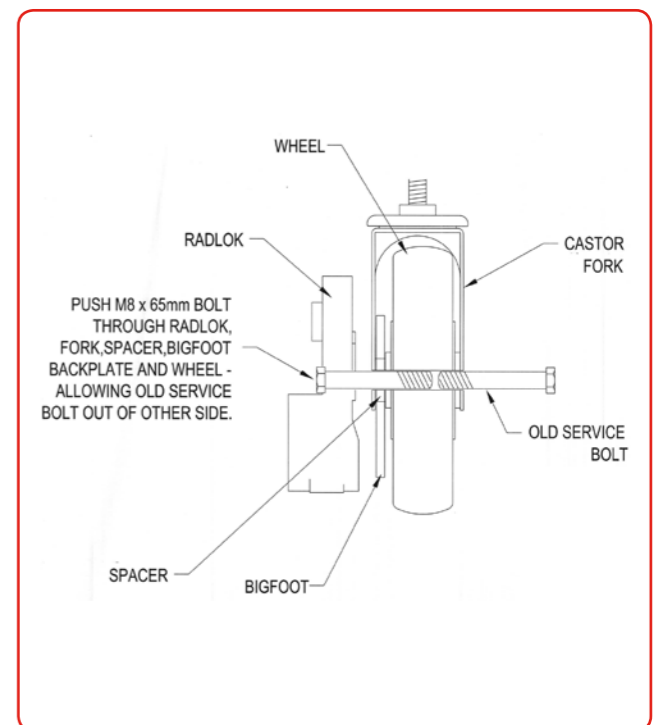
Standard and optional features;

### Design:

- Brake Foot Plate: Width -150mm  
Height -76 mm
- Outside Radlok Casing: Width -65mm(Side view)  
Height -110mm (front/back)
- Nylon Structure with non-marking rubber brake foot

### Fitting Guidelines:

Fit two Radloks per trolley, one on the front right and the other on the rear left. Fitting them diagonally offers the best stopping power. We supply 20+ different fittings for different castors and supply Radloks for 100mm (four inch) as well. If the wheels are riveted (rather than a service bolt) then there will be an additional costs in removing them before a Radlok can be correctly fitted.



## 2. Radpave



Radpave is the term given to the common use of the triggering system where we encase the triggering assemblies in concrete to make it sympathetic with the surface scheme/paving at the car park (car lot) exits. We make a wide range of Radpave from slabs to paving sets and use a range of colours and other techniques to copy the paving that is already there. For tarmac roads we use a charcoal coloured block. When using blocks we create moulds of two and three blocks together, this produces the appearance of a many single blocks but creates a better triggering barrier. We always aim to keep the triggering system as subtle as possible. Basically as long as we can hide the assemblies under 6mm of non ferrous material the Radloks should operate perfectly well. Our favoured method is to use PVC tube which can be made to look like a expansion joint. Other popular applications have the assemblies under floor tiles or within mat wells.

Standard and optional features;

**Design:**

- PVC/tube (Black/Grey) is an ideal cover for the Radlok triggering system in retail surfaces
- It is desirable to install the channel where it may be naturally found i.e. between door posts, etc.
- The channel is simple in profile

The channel will come complete with the triggering assembly and needs to be fitted flush with the ground so that only flat 'top' of the channel can be seen.



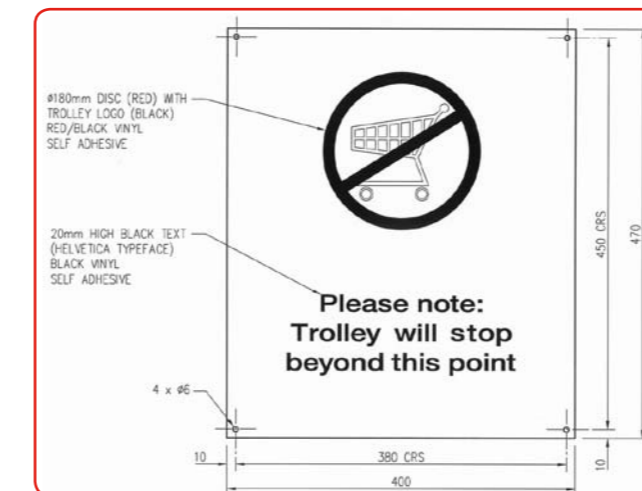
## 3. Radlok Signs

Signage is a legal requirement. It is essential to advise customers that a Radlok system is fitted to a trolley and that if the trolley is taken outside of the demarcation zone that it will stop suddenly. There are several types of signs used by our customers – see drawings for examples. We would recommend that there is some signage at trolley collection areas and clearly further signs at the exit points. An additional suggestion would be to have signs in the trolleys or signs/leaflets at the checkouts acting as a reminder.

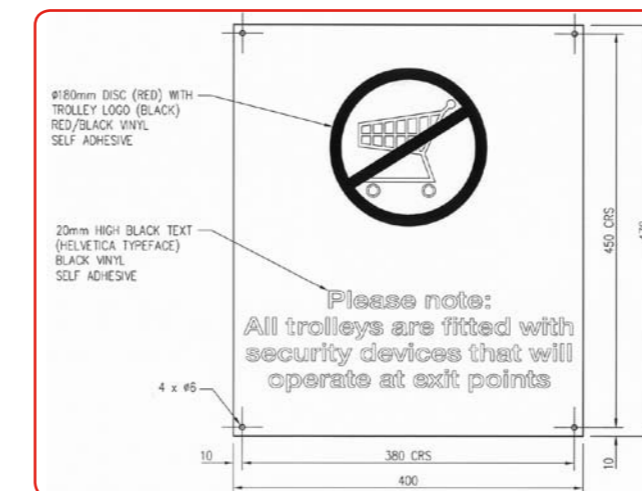
Standard and optional features;

**Design:**

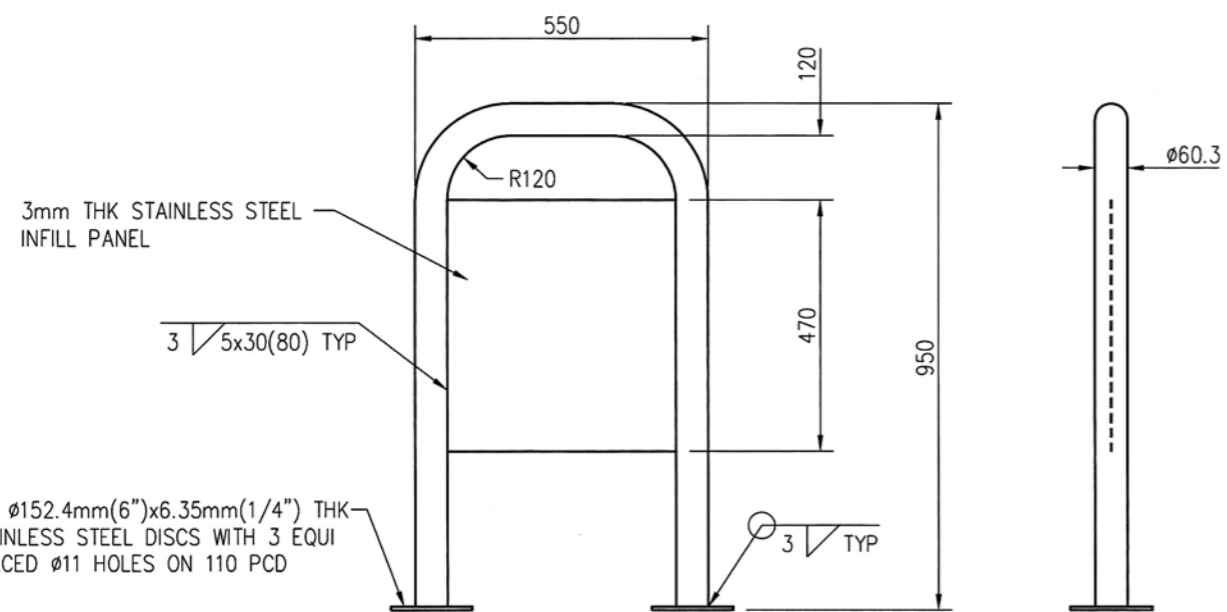
- Type 1 - Ref. SIG-06568/



- Type 2 - Ref. SIG-06569/



Different companies have their own views on how best to mount their signs. Fixing them to a wall, if available, is the simplest – otherwise a sign loop like this is very durable and effective.



NOTES:

1) FOR POTTED TYPE SIGNHOLDER SEE DRG. No. 03905

2) MANUFACTURE FROM 316 GRADE STAINLESS STEEL

Scale 1:10

USED ON: RADLOK TROLLEY TRAP

## 4. Coin Locks

With coin deposit locks from ITABmk, customers are encouraged to return trolleys after use to designated collection points, so that they are ready for use by the next customer. Your customers will find it easier to locate a parking space too, as trolleys are less likely to be abandoned in valuable car spaces.

The Coin Lock is an extremely strong and easy to use trolley lock. The high quality lock is all solid metal, no plastic and the chain stainless steel, therefore 100% rustproof. The unique and strong locking mechanism enables the lock to be highly vandal and weather resistant.

The coin lock offers customised logo print and colour to complement your corporate design or colour. Furthermore, the lock will accept one or two different coin values of your choice using only one coin-slot for both coins (also compatible for euros).



Standard and optional features;

**Design:**

- The entire unit is constructed of a combination of both metal & plastic
- It is 135mm in length with a width of 47mm and height of 30mm
- In terms of coin compatibility: the lock can be made compatible for any coin including Euro's
- The stainless steel chain and large key ensure extreme strength and longer life

**Fitting Guidelines:**

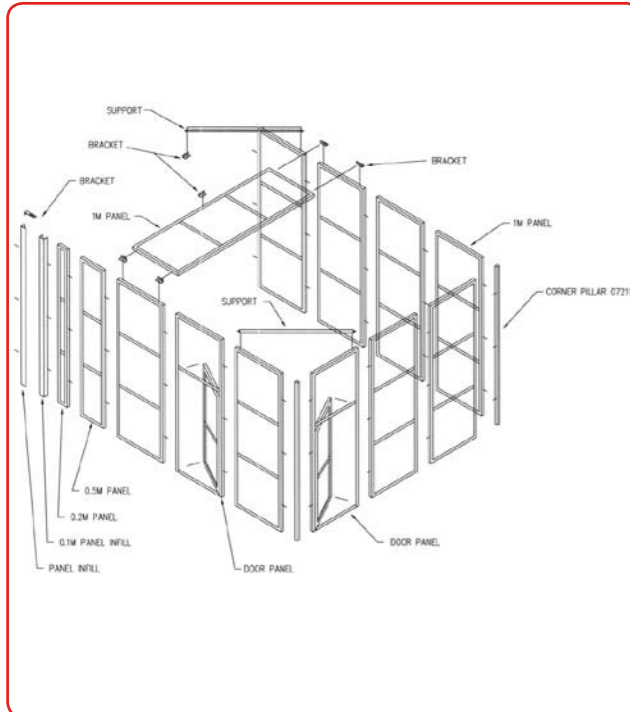
- Option 1 : The lock is safely fitted to any handle using screws through the handle
- Option 2 : Fitting is quick and easy using self-tapping screws through the handle, so it is not necessary to drill preliminary holes in the handle
- Option 3 : Eliminate holes in the handle with the lock 'easy fit' mounting sleeve



## 5. Modular Security Cages

ITAB<sup>mk</sup>

LOSS PREVENTION



Modular mesh panels allow you to choose the size that best fits your application. Panels bolt directly together. The design utilises fewer total parts, making installation quicker and less complex. These panels can be configured to suit on-site requirements as they are based on the concept of 3m high panels arranged side by side to reach desired partition width. Enclosures are secure, as hardware is inaccessible from the outside. Entry gate panels are available with pad-lock facility (not as standard). Construction is floor fixed using suitable floor anchors. The modular design is what allows this flexibility; use it, re-use it, move it around with ease. These modular mesh panels can be removed, relocated, and put back together. You can change their configurations when your needs change. If a panel is damaged, you just remove the old panel and order a new one. This product is ideal for creating secure areas, whether it be to prevent pilferage, to enclosing work areas, to creating customised, accessible security areas in warehouses, manufacturing facilities, and distribution centres. Also great for stock rooms and other secure locations.

Standard and optional features;

### Design:

- Welded construction from mild steel angle and weld mesh polyester powder coated (finish EPC or wet paint – colour black).
- Panels install vertically, between angular posts. The panels are 3m tall, come in a variety of widths – 1m, 0.5m & 0.2m. Doors come as standard 1m width
- A ceiling is an additional extra and has to be dictated in multiples of 3m



## 6. Slamlocks (ADS Anker/IBM & Cashbase)

ITAB<sup>mk</sup>

LOSS PREVENTION

This durable low-cost system protects the key hole of a cash drawer from unauthorised entry and comes complete with a radial key lock & serial number registration. It is designed to act as a visual deterrent to potential criminals who would consider breaking into a cash drawer on a closed cash checkout. The product is designed to be used when the store is open but when the checkout is unmanned and therefore saves time as the cash drawer can just be locked securely rather than being emptied or removed. A patented product (GB 2291116) – we have a range of Slamlocks which are compatible with;

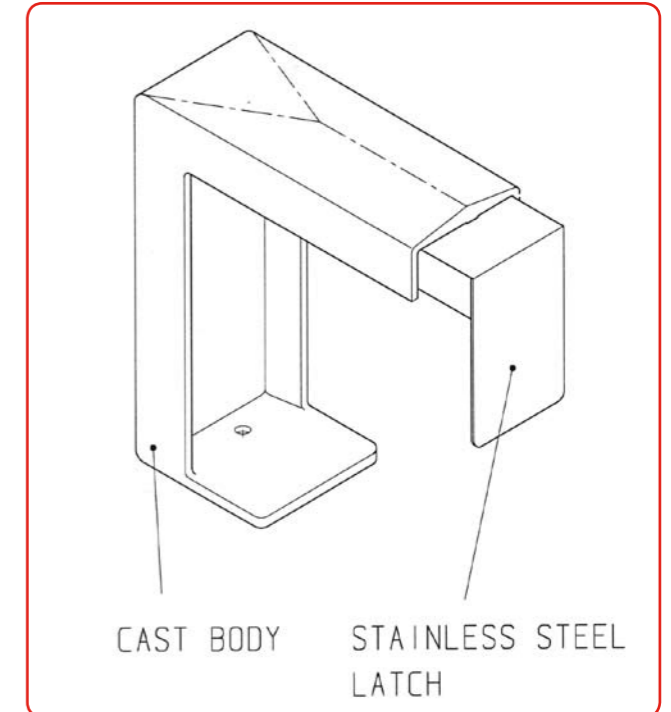
- ADS Anker cash drawers
- IBM cash drawers
- Cashbase 460 Modular

The standard configuration for the Slamlock is based on a fixed casing. For a slight premium an additional configuration is also available which is based on a fabrication which can then accommodate modification to suit customer needs.

Standard and optional features;

### Design:

- Construction: Aluminium, Mild Steel and Stainless Steel
- Patented product GB 2291116
- Standard colour is EPCS semi gloss red – various colours are available by request but could be subject to additional charge
- Standard configuration is based on a fixed casing design, a fabrication is available at additional cost
- Sizes – different depths are applicable for each model (ADS –156mm/IBM –245mm/Cashbase –171mm)



# ITAB<sup>mk</sup>

CMB House, Sherbourne Drive, Tilbrook  
Milton Keynes, Buckinghamshire  
MK7 8BA, United Kingdom

Phone +44 1908 366688  
Fax +44 1908 368811  
Email [sales@itabmk.com](mailto:sales@itabmk.com)  
Web [www.itabmk.com](http://www.itabmk.com)

We reserve the right to change our  
product specification as necessary.