



# Kestrel

■ Magnetic Suspension System



## The Kestrel Load-Release Suspension System

### Reducing the risk of self-harm

Two areas have been identified as environments where persons are at greatest risk of self-harm: mental health hospitals (including psychiatric wards in general hospitals); and prisons and detention centres. In these areas the incidence of self-harm by ligature has been a serious cause of concern. The Kestrel Magnetic Suspension System provides a highly effective means of greatly reducing this risk. Its load-release brackets are discreet and attractive, and the system is in use in psychiatric institutions and prisons throughout the UK.

The patented Kestrel system is simple and extremely effective. It will securely hold a range of items by powerful short-range magnetic attraction. When an abnormal load is applied the magnetic force is overcome and releases its load. And it can do this time after time. There will be no decline in performance, and as there is no mechanical restraint at all, nothing can jam, break or wear out. After an incident, all that is required is for the suspended item to be held immediately below the magnetic bracket or brackets. The magnetic force will then raise the item and click it into its correct position.

The manufacturers of Kestrel have an ongoing commitment to quality and innovation, and new or improved applications of the Kestrel principle are continually being researched. Further anti-ligature items are currently being developed, and our designers are happy to discuss any specific client requirements.

The Kestrel system is available through a nationwide network of customers / distributors, with trained and accredited installation and service teams providing an unrivalled level of support.

### Loading Figures

No part of a Kestrel installation should be able to withstand a vertically downward force of more than 400 Newtons, equivalent to a static load of approximately 40kg. Most readings will be in the region of 15 - 30kg, depending on configuration and proximity to brackets.

### Testing and maintenance

It is an NHS Estates requirement that items suspended on load-release support systems should be maintained and load-tested in accordance with the manufacturer's instructions on an annual basis. The Kestrel system is maintenance free and its performance remains constant even after repeated use. It is advisable, however, to carry out a visual inspection of Kestrel fittings to identify any possible damage or evidence of tampering.

### Safety

Sensitive electronic equipment may be damaged by proximity to a magnetic field and should not come within 15cm of the underside of the brackets. **Warning;** Articles suspended from the Kestrel Magnetic Suspension System will come down when pulled! Any load-release device, by its nature, may cause damage when operated.

### The heart of the Kestrel system: the patented magnetic brackets



Wall-fix bracket in unbreakable polycarbonate, with smoothly contoured and angled top surface for safety. Dimensions: L48mm W37mm H60mm



The new top-fix bracket in unbreakable polycarbonate. Slim profile, with all fixings concealed - an essential safety feature. Dimensions: L82mm W57mm H12mm

## Movatrack cubicle / shower track



The Movatrack hospital cubicle track system is in use in many hospitals throughout the world including major London hospitals. The rigid, high-grade aluminium track section and free-running roller hooks are designed to give years of trouble-free service. Movatrack with Kestrel offers a highly respected track system with the security of the acclaimed Kestrel Magnetic Suspension System - designed to complement each other.

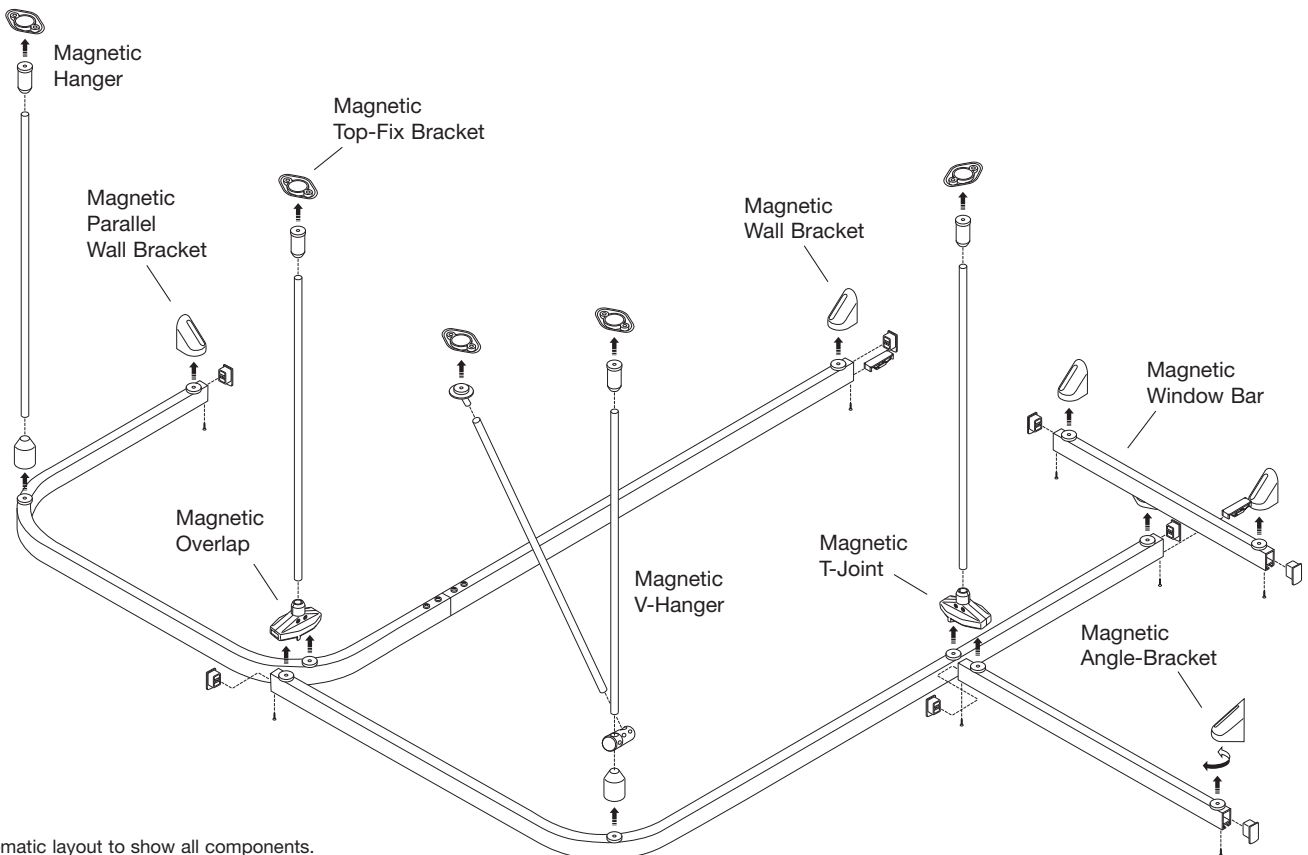
Specifically for high-risk mental health areas, Movatrack with Kestrel uses magnetic wall-fix brackets where tracks meet the wall, and magnetic top-fix brackets where suspension hangers meet the ceiling. This ensures that, under excess load, the suspension hanger separates from the ceiling bracket - an essential safety feature, as it is surprisingly easy to attach a cord to a fixed vertical rod and use it as a ligature point.

Suggested layouts and details of individual fittings are shown in the Movatrack technical manual - available on request. Movatrack with Kestrel should always be fitted by trained and accredited personnel.

**Cubicle track specification:** Movatrack cubicle track with Kestrel Magnetic Suspension System as manufactured by Yewdale Bridge, 01268 570900. Track manufactured from aluminium with silver anodised / white powder-coated finish, complete with roller hooks at 10 per metre, curtain removal points and magnetic wall-fix brackets, top-fix brackets and overlaps as necessary, spaced in accordance with manufacturers recommendations. Fitting to be carried out by trained and accredited personnel.

**Shower track specification:** Movatrack shower track with Kestrel Magnetic Suspension System as manufactured by Yewdale Bridge, 01268 570900. Track manufactured from aluminium with white powder-coated finish, complete with roller hooks at 10 per metre, and magnetic wall-fix or top-fix brackets as necessary, spaced in accordance with manufacturers recommendations.

**Please refer to NBS Plus**



Schematic layout to show all components.

## Vitesse K6200 Curtain track



Kestrel brackets were designed to complement the high performance and pleasing appearance of the K6200 hand drawn track. It is a white finished aluminium track, lightweight yet strong, and with roller runners is ideally suited to all hospital applications.

Tests have shown that for anti-ligature purposes it is most important that the complete track collapses. Even where a fixed track provides no ligature points, heavy weights can be suspended from the curtains. This is a serious potential risk. With the K6200 the track and curtain complete will part from the Kestrel brackets under abnormal load and can then be simply and quickly reinstated.

**Specification:** Vitesse K6200 hand drawn curtain track with Kestrel Magnetic Suspension System, as manufactured by Yewdale Bridge, 01268 570900. White aluminium track complete with roller runners at 16 per metre, and magnetic wall-fix or top-fix brackets as necessary, spaced in accordance with manufacturers recommendations.

Please refer to NBS Plus



### K6200 bracket spacing

Width		No. of brackets	Width		No. of brackets
39 1/2	1000	2	126	3200	4
47 1/4	1200	2	134	3400	5
55	1400	2	141 3/4	3600	5
63	1600	3	149 1/2	3800	5
71	1800	3	157 1/2	4000	5
78 3/4	2000	3	165 1/4	4200	5
86 3/4	2200	3	173 1/4	4400	6
94 1/2	2400	4	181	4600	6
102 1/4	2600	4	189	4800	6
110 1/4	2800	4	196 3/4	5000	6
118	3000	4			

## Vitesse K9500 Flexible curtain track



Developed in response to Prison Service requirements, the special plastic formulation of the K9500 is designed to be flexible enough to prevent its use as a weapon by prisoners or violent psychiatric patients. It is shatterproof and will give no sharp edges if deliberately broken. Only for use with lightweight curtains and where the risk of violence precludes the use of the standard K6200 aluminium track.

**Specification:** Vitesse K9500 Flexible hand drawn curtain track with Kestrel Magnetic Suspension System, as manufactured by Yewdale Bridge, 01268 570900. White plastic track complete with gliders at 16 per metre, and magnetic wall-fix or top-fix brackets as necessary, spaced in accordance with manufacturers recommendations.

Please refer to NBS Plus

### K9500 bracket spacing

Width		No. of brackets	Width		No. of brackets
19 3/4	500	2	98 1/2	2500	7
35 1/2	900	3	114	2900	8
51	1300	4	130	3300	9
67	1700	5	145 1/2	3700	10
82 3/4	2100	6			

## Vertical blinds



High quality vertical blinds with white aluminium headrails specially adapted for anti-ligature use. Louvres have weights and white stabilising chain, with the security option of sewn-in weights with no chain. Choice of Kestrel top-fix brackets or Kestrel wall-fix brackets with extension plates.

- KVL20** Metal bead-chain tilt control and cord draw. 127/89/63mm louvres.
- KVL21** Single wand controlling both tilt and draw. 127/89/63mm louvres.
- KVL60** Premium headrail with wheeled carrier trucks and bead-chain mono control. 127/89mm louvres.
- KVL64** Premium headrail with wheeled carrier trucks and crack mono control. Optional detachable crank. 127/89mm louvres.

**Specification:** Defiant KVL20 / KVL21 / KVL60 / KVL64 Vertical blind with Kestrel Magnetic Suspension System as manufactured by Yewdale Bridge, 01268 570900. 127/89/63mm louvres in flame-retardant fabric from standard range, complete with louvre weights and stabilising chain / sewn-in weights.

**Please refer to NBS Plus**

## Roller blinds



Robust and attractive roller blinds with aluminium barrel mounted on a white aluminium back bar specially adapted for anti-ligature use. Choose from a huge range of fabrics including dim-out, blackout and solar reflective. Choice of Kestrel top-fix or wall-fix brackets.

- KR20 Sidewinder** – Metal bead-chain side control with metal brackets.
- KR22 Spring control** – Strong spring mechanism with plastic brackets.
- KR31 Slow-rise spring** – Premium decelerator spring mechanism in slim 23mm barrel with plastic brackets.
- KR32 Slow-rise spring** – As KR31 but with strong 32mm barrel.

**Specification:** Defiant KR20 Sidewinder / KR22 Spring control / KR31 Slow-rise spring / KR32 Slow-rise spring roller blinds with Kestrel Magnetic Suspension System as manufactured by Yewdale Bridge, 01268 570900. With flame-retardant fabric from standard range.

**Please refer to NBS Plus**

### Vertical blinds maximum sizes

	Min. Width*	Max. Width	Max. Drop	Max. m <sup>2</sup>
<b>KVL20</b>	260	4000	3200	10.0
<b>KVL21</b>	260	4000	3200	8.0
<b>KVL60/127</b>	900	4000	3200	10.0
<b>KKL60/89</b>	900	2700	3200	8.6
<b>KVL64/127</b>	900	4000	3200	10.0
<b>KVL64/89</b>	900	3400	3200	10.0

### Roller blinds maximum sizes

	Min. Width*	Max. Width	Max. Drop	Max. m <sup>2</sup>
<b>KR20</b>	200	2000	3300	5.0
<b>KR22</b>	500	2000	3000	4.0
<b>KR31</b>	370	1500	3000	3.5
<b>KR32</b>	550	2000	3000	4.0

\*Where adjacent blinds are fitted with Kestrel, there should be no more than 2 Kestrel brackets within a total distance of 700mm.



## A Kestrel mounting plates

Many items may be converted to anti-ligature status by mounting them on Kestrel mounting plates. Available in three sizes, the plates are held vertically against the wall solely by the magnetic attraction of the Kestrel brackets hidden behind them.

<b>K09AW</b>	100 x 170mm, with 1 bracket. Suitable for toilet roll holders, etc.
<b>K09BW</b>	190 x 335mm, with 2 brackets. Suitable for soap dispensers, etc.
<b>K09CW</b>	370 x 470mm, with 2 brackets. Suitable for towel dispensers, etc.

## B K505PW Shower head holder

Widely requested by hospital staff, the Kestrel magnetic shower head holder eliminates another potential ligature point in a location where patients would often be left unattended. Includes mounting plate and 1 bracket.

## C K509 Toilet roll holder

A high quality holder in polished satin steel, and including a mounting plate and 1 bracket.

## D K509PW Toilet roll holder

A lightweight holder manufactured from white plastic, and including a mounting plate and 1 bracket.

## E K510 Soap dispenser

Satin stainless steel soap dispenser with a mounting plate and 2 brackets.

## F K511 Paper towel dispenser

Satin stainless steel towel dispenser with a mounting plate and 2 brackets.

## G K512 Soap dish

Polished satin steel soap dish with mounting plate and 1 bracket.

## H K512PW Soap dish

A lightweight soap dish manufactured from white plastic, and including a mounting plate and 1 bracket.

## I K513 Curtain hold-back

For a luxury touch without the risk of self-harm. In satin stainless steel, and including a mounting plate and 1 bracket.

## J K514 Shelf set

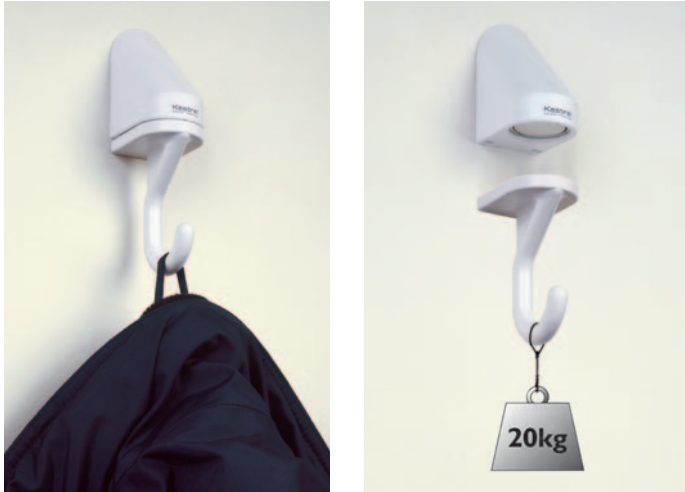
Clear polycarbonate shelf with 2 Kestrel wall-fix brackets.

**Specification:** Kestrel K09A/B/CW Mounting plates / K509/K509PW Toilet roll holders / K510 Soap dispensers / K511 Towel dispensers / K512PW Soap dishes / K513 Curtain hold-backs / K514 Shelf sets as manufactured by Yewdale Bridge, 01268 570900, with Kestrel Magnetic Suspension System.

**Please refer to NBS Plus**

If you require any anti-ligature accessory not shown on this page, please enquire. We may be able to help.

## K507 Coat hook



Developed in response to repeated requests from hospital staff, the Kestrel coat hook is the answer to what seemed an intractable problem. A hook was needed that was as strong as a standard coat hook in normal use, yet would give NO point of ligature. The Kestrel coat hook is in two parts which perfectly complement each other, with the hook simply parting from its bracket under abnormal load.

**Specification:** Kestrel load-release coat hook K507 as manufactured by Yewdale Bridge, 01268 570900. Unit complete with magnetic suspension system to allow hook to part from bracket under excessive load.

**K508 Pliable coat hook.** For areas where violence is a serious risk, the detachable hook of this unit is manufactured from pliable material. Although its loading is reduced it has the advantage of being unusable as a weapon.

**Specification:** Kestrel pliable load-release coat hook K508 as manufactured by Yewdale Bridge, 01268 570900. Unit complete with magnetic suspension system to allow hook to part from bracket under excessive load.

**Please refer to NBS Plus**

## K500 Wardrobe rail



There have been a number of self-harm incidents reported involving fixed wardrobe rails, so any risk assessment should include a serious appraisal of this possibility. The Kestrel load release wardrobe rail provides the solution by suspending a lightweight aluminium rail from Kestrel top-fix brackets. Under excess load the rail and its holders will part from the brackets. The alternative K530 features a polycarbonate rail (see inset picture) in place of aluminium. Although its useful capacity is reduced it poses less of a weapons risk in violent situations. The overall width of the standard unit is 500mm but longer rails are available using intermediate brackets and holders.

**Specification:** Kestrel load-release wardrobe rail K500 (aluminium) / K530 (polycarbonate) as manufactured by Yewdale Bridge, 01268 570900. Lightweight rail, with holders magnetically suspended from top-fix brackets.

**Please refer to NBS Plus**

## K502 Towel rail



Due to the pleasing lines of the wall-fix brackets the Kestrel load-release towel rail looks smart and functional. But apply an abnormal load and it will part - promptly, efficiently and without damage. Available in two versions: K502 with silver anodised aluminium rail, and K504 with clear polycarbonate rail.

**Specification:** Kestrel load-release towel rail K502 (aluminium) / K504 (polycarbonate) as manufactured by Yewdale Bridge, 01268 570900. Lightweight rail, with holders magnetically suspended from wall-fix brackets.

**Please refer to NBS Plus**

## K506 Rail hook set



The economical answer to any load-release multiple hook requirement. The strong ABS hooks will slide on the rail for ease of positioning, and hang freely to ensure that the centre of gravity of the load remains central.

**Specification:** Kestrel load-release rail hook set K506 as manufactured by Yewdale Bridge, 01268 570900. Set of five ABS hooks mounted on lightweight aluminium rail, with holders magnetically suspended from wall-fix brackets.

**Please refer to NBS Plus**

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MAGNETIC SUSPENSION SYSTEM

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