

KGUARD®
BEST PRACTICE GUIDE

KGUARD® UK 2020

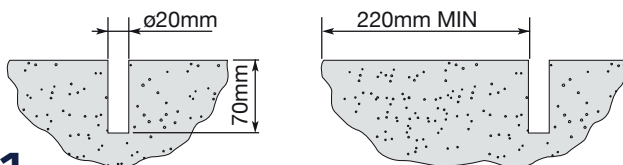
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Working with Concrete Slabs

When working with concrete slabs the barrier protection can be erected in three ways - with K2 Socket Bases, Adj. Slab Edge Brackets and Multi-Slab Clamps.

K2 Socket Bases

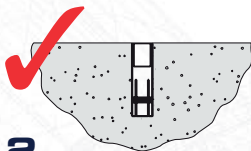


1

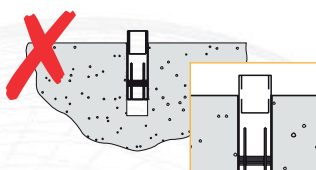
Only install into full strength & fully cured concrete surfaces.

Drill a $\varnothing 20\text{mm}$ hole, 70mm deep into the concrete making sure it is no less than 220mm from the slab edge.

Ensure that sharp drill bits are used and that the hole is cleared of debris using a brush and blow pump.

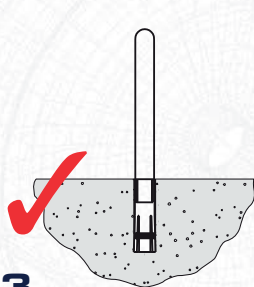


2

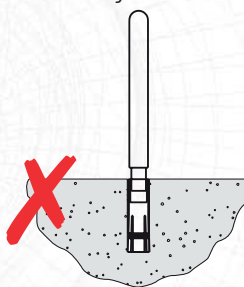


Insert the M16 Anchor slotted end first. The anchor must sit flush with the slab surface and not sit above.

If the anchor sits proud check that the hole size is correct and is free of any debris.



3



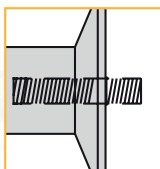
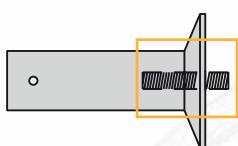
Set the anchor with the correct setting tool. Strike the tool until solid resistance is encountered.

CONCRETE SLABS

Working with Concrete Slabs

⚠ Always tether your tools and edge protection products.

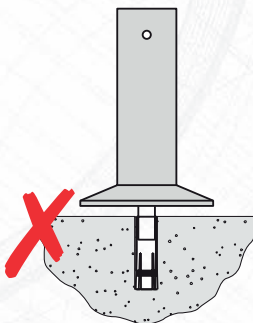
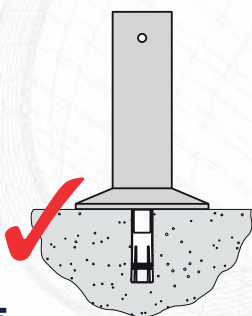
K2 Socket Bases cont...



Note: If the anchor is installed below the surface then the stud can be reversed

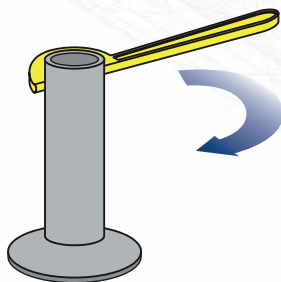
4

The socket base studs should be fitted as shown. The longer threaded portion fits into the base



5

Thread the K2 Socket Base into the anchor until the bottom is touching the concrete.



6

Tighten the socket base with the KGUARD Spanner.

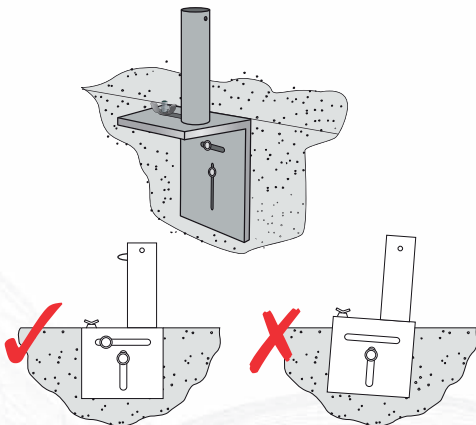
Working with Concrete Slabs

⚠ Always tether your tools and edge protection products.

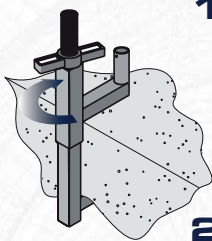
Adjustable Slab Edge Brackets

Place the Adjustable Slab Edge Bracket into position and secure using 2 x 12mm concrete bolts to stop any possible rotation.

(Fixings are supplied by site).

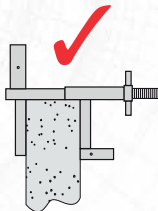
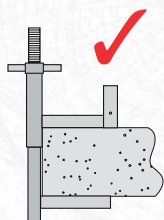


Multi-Slab Clamp



- 1 Fit the clamp flush with the slab and tighten the jack nut with your hand. Next strike the jack nut to fully tighten the clamp. Ensure the clamp is vertical when installed.

- 2 Note the 2 different applications for which this clamp can be used. Slab or Up-stand.



CONCRETE SLABS

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Working with Formwork

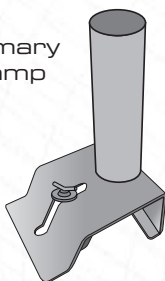
⚠ Always tether your tools and edge protection products.

Protection can be provided with two types of Aluminium Beam Clamps and four types of Timber Beam Clamps.

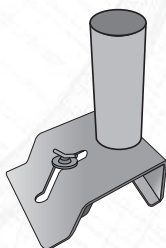
Clamp Types

Aluminium Primary Beam Clamp	150 mm Beam size	000020
Aluminium Secondary Beam Clamp	150 mm Beam size	000010
PERI Primary Beam Clamp	60mm Beam size	000062
PERI Secondary Beam Clamp	60mm Beam size	000012
Doka Primary Beam Clamp	40mm Beam size	000081
Doka Secondary Beam Clamp	40mm Beam size	000080

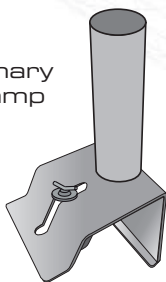
Doka Primary Beam Clamp



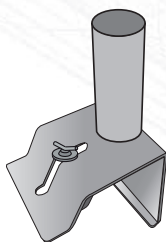
Doka Secondary Beam Clamp



PERI Primary Beam Clamp



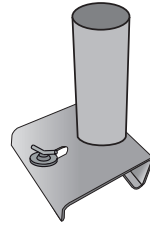
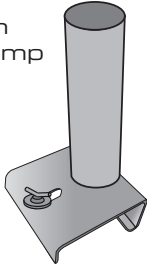
PERI Secondary Beam Clamp



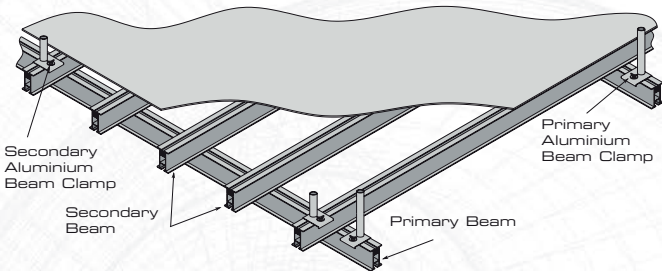
Working with Formwork

⚠ Always tether your tools and edge protection products.

Primary
Aluminium
Beam Clamp



Secondary
Aluminium
Beam Clamp



Note: Ensure formwork has been correctly assembled to manufacturers specification and all beams are correctly assembled together. All Aluminium and Timber Beam Clamps must be at least 150mm in from the end.

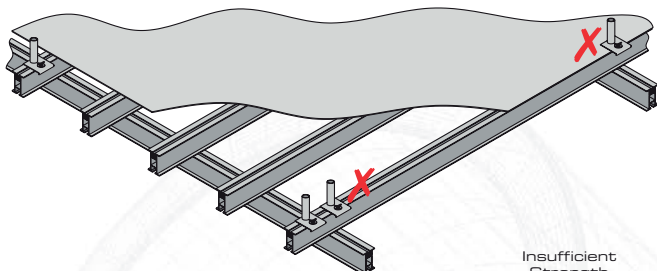
FORMWORK

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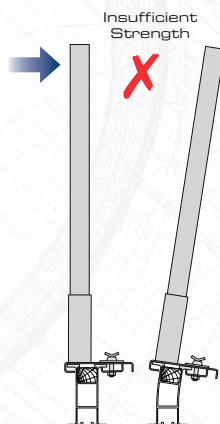
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Working with Formwork

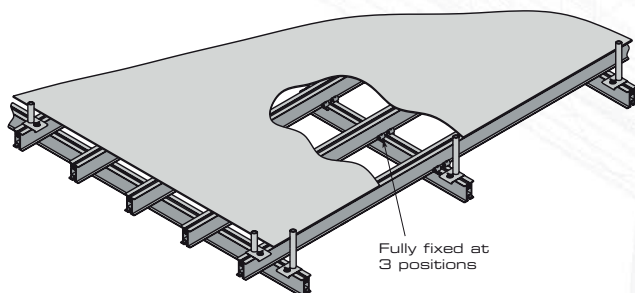
⚠ Always tether your tools and edge protection products.



Barriers fitted to these incorrect clamp points would not support the required loading. Aluminium beams are very flexible in this direction. Always use the Primary Beam Clamps.



If the distance between primary beam clamp positions exceeds 2400mm then under sling a shorter primary beam to support the clamp. Ensure that the beam is fully fixed in at least 3 intersections.



Note: Check this arrangement is acceptable for the manufacturers connectors and beams.

Notes

NOTES

PAGE

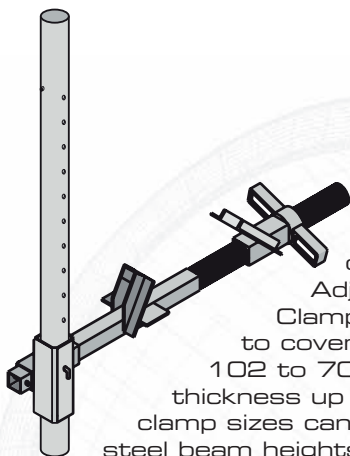
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08

Working With Structural Steelwork

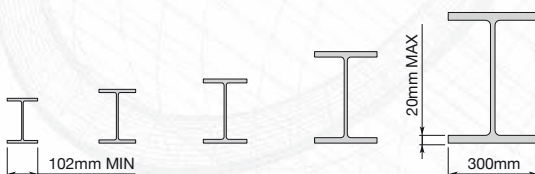
⚠ Always tether your tools and edge protection products.



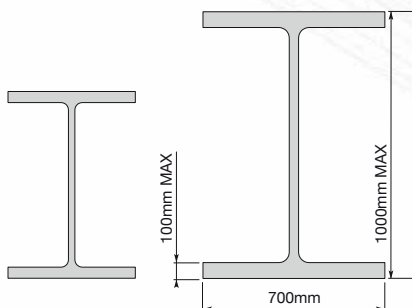
Edge protection can be fitted to steel work using Adjustable I-Beam Clamps, I-Beam Attachments or Welded Sockets.

Adjustable I-Beam Clamps come in two sizes to cover flange widths from 102 to 700mm and flange thickness up to 100mm. Both clamp sizes can accommodate steel beam heights up to 1000mm.

Standard Clamp



Maxi Clamp

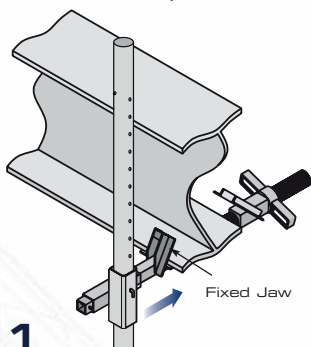


Working With Structural Steelwork

⚠ Always tether your tools and edge protection products.

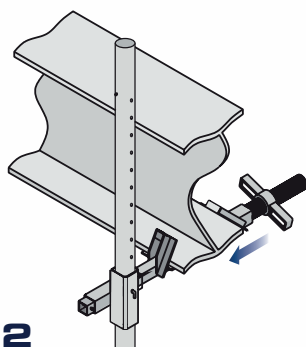
Fitting the Standard / Maxi Clamp

Standard/Maxi Clamps are fixed onto steelwork up to 2400mm centres.



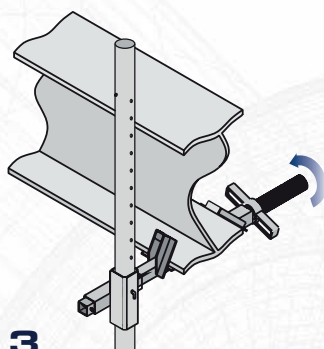
1

Push fixed jaw against beam flange



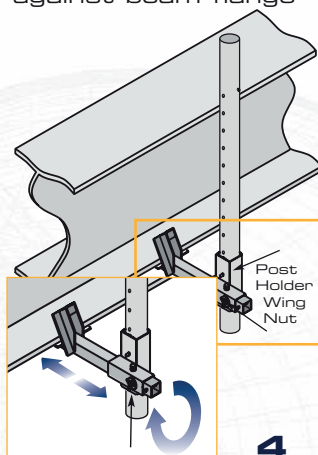
2

Push sliding jaw against beam flange



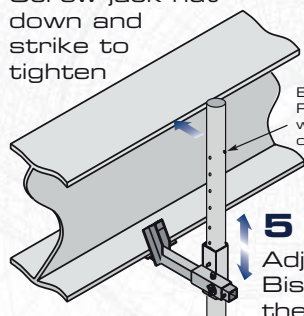
3

Screw jack nut down and strike to tighten



4

Move post holder close to the edge and bolt. Strike the wing nut to tighten.



5

Adjust height of post until Bissell pin sits level with the beam top surface

STRUCTURAL STEELWORK

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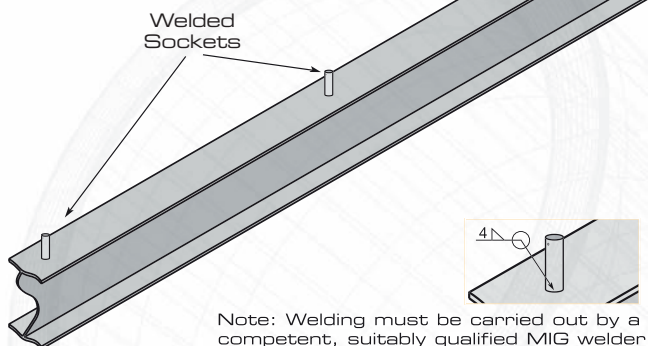
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Working With Structural Steelwork

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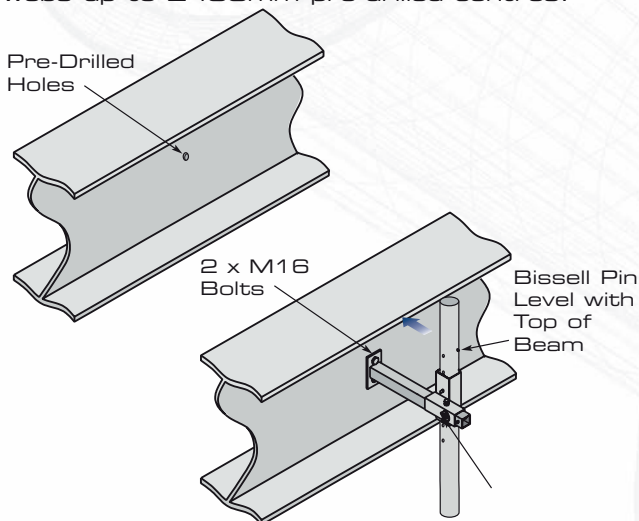
Welded Sockets

Sockets are welded onto the steelwork up to 2400mm centres either during fabrication or on site before erection. Sockets must be welded all round with a min 4mm fillet weld



Adjustable 'I' Beam Attachment

Brackets are bolted onto the steelwork beam webs up to 2400mm pre-drilled centres.



(Fixings are supplied by site).

Working With Structural Steelwork

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Steel installation sequence

Ideally the installation should be carried out whilst the steel beams are on the ground. In some instances though it may not be possible, however the fixing process is the same. I-Beam Attachments are fixed to the web of the steel beam at a maximum of 2400mm centres. Body length 720mm / flute height 805mm.

• Step 1

Whilst the steel beam is on the ground offer the I-Beam Attachment to the web of the steel beam where the hole has been pre-drilled. Insert the two M16 bolts with washers and fix using a washer and nyloc locking nut at the back. Tighten until solid resistance is encountered.

• Step 2

Determine the projection and secure using the primary and secondary fail-safes. The body of the attachment allows for 39mm incremental adjustment.

• Step 3

Now insert the I-Beam Flute and determine the vertical height of edge protection. Again, secure in place by tightening both primary and secondary fail-safes. The Flute allows for 75mm incremental adjustment.

• Step 4

Insert the KGUARD Support Safety Post into the top of the Flute and rotate to fully engage the K-Lock System.

• Step 5

Attach the KGUARD barriers to the KGUARD Support Safety Post and secure into position using the latches. (See page 17 - step 3). This also enables the anti-uplift system.

• Step 6

Lift the edge protection into place ensuring there are guide ropes attached at each end of the beam. It may be necessary to sling the chains to an I-Beam attachment using a minimum 7mm rope. This eliminates the lean the edge protection has on the steel beam.

STRUCTURAL STEELWORK

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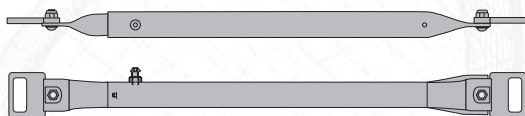
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KGUARD Multi-Application System

⚠ Always tether your tools and edge protection products.

Adjustable Link Bar

KGUARD Adjustable Link Bars are available in 2 standard sizes: 0.8m-1.5m and 1.5m-2.4m which allows them to work in conjunction with our standard Guard Barriers as part of our Multi-Application System. The MAS can also provide flexible solutions for applications such as Stairways and Vehicle Trailers.



Step 1

Installing KGUARD Adjustable Link Bars to KGUARD Multi-Application Post follows the same process regardless of the application. Set the bracket latches on the KGUARD Multi-Application Post to the horizontal 'open' position as shown in fig1.

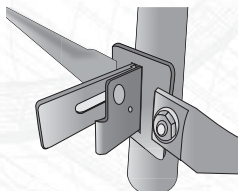


Fig 1

Step 2

From inside the slab edge and with the Link Bar securely tethered at one end, position the eye from one end of the Link Bar over the inside "open" housing bracket on the KGUARD Multi-Application Post. Now secure by moving the housing bracket latch to the vertical "lock" position as shown in fig 2.

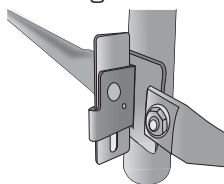


Fig 2

KGUARD Multi-Application System cont...

⚠ Always tether your tools and edge protection products.

Adjustable Link Bar cont...

Step 3

Loosen the Link Bar primary fail-safe bolt using an 8mm allen key and the secondary fail-safe bolt with a 21mm spanner. Do not use an impact gun as this may cause threading of the bolt. Now extend the Link Bar to the required length and then tighten the two fail safe bolts. Making sure the Link Bar is tethered, remove and position onto the outer "open" housing bracket on the KGUARD Multi-Application Post. Move the housing bracket latch to the vertical "lock" position.

Step 4

Remove the tether and position the other eye of the link bar over the "open" housing bracket on the KGUARD Multi-Application Post. Now secure by moving the housing bracket latch to the vertical 'lock' position as shown. Position the Link Bars in alternate directions to ensure even spacing between the upper and lower Link Bar i.e. one with the inner tube to the left and one with the inner tube to the right.

Step 5

KGUARD highly recommend using the KGUARD Inspection Tags which can be secured through the hole in the housing bracket latch plate with a cable tie or similar. This prevents the unauthorised removal of the Link Bars as well as providing a useful visual indicator for inspection purposes.



Applications



KGUARD Walkway System

⚠ Always tether your tools and edge protection products.

The KGUARD Walkway system offers great flexibility for the provision of Safe Site Walkways, Demarcation Zones and Exclusion Zones to suit the most complex of site access areas.

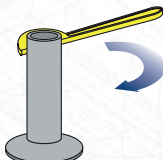


Step 1

Position the Counter Balance Footplates in the desired location at maximum 2400mm centres. Note that the minimum required distance between the KGUARD Walkway System and an open edge is 2000mm.

Step 2

Screw the KGUARD K2 Socket Bases into the Counterbalance Footplates and tighten with a KGUARD Socket Spanner. The K2 Socket Bases can be in one of three positions on the footplate depending on the desired application and the specific layout of the site area.



Step 3

Insert Support Safety Posts into the K2 Socket Bases and engage the K-Lock Safety System. Install the KGUARD Barriers onto the KGUARD Support Safety Post as per instructions on Page 17 Step 2 and Step 3 of this guide.

Note The KGUARD Walkway System is designed for the provision of Safe Site Walkways, Demarcation Zones and Exclusion Zones only and should not be considered for use as Edge Protection.

Notes

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KGUARD Installation Guide

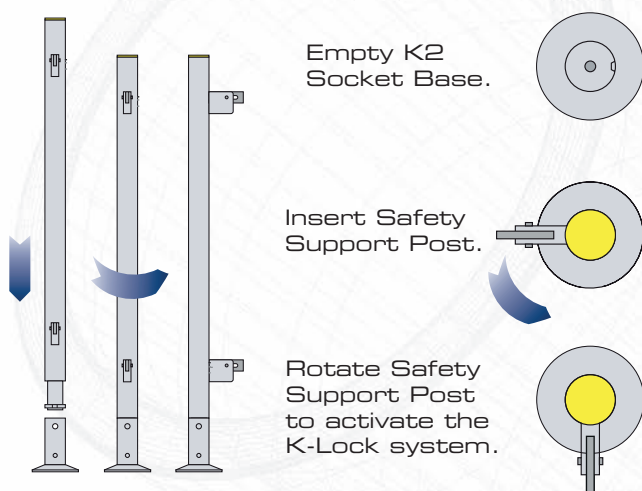
⚠ Always tether your tools and edge protection products.

Step 1

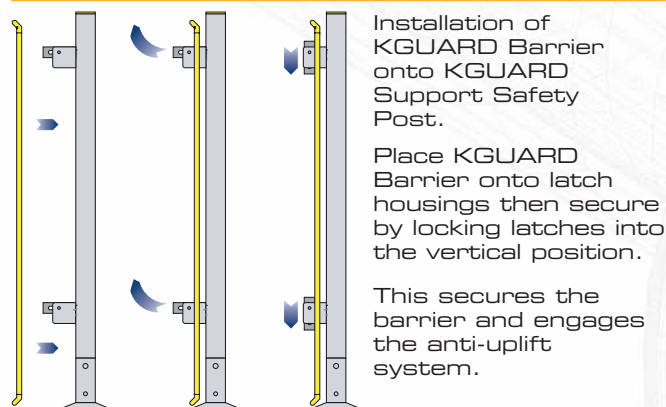
Fix using an M16 anchor and install K2 Socket Base as detailed on pages 2 & 3.

Step 2

Insert the KGUARD Support Safety Post into the K2 Socket Base and rotate as shown to engage the K-Lock Safety System.

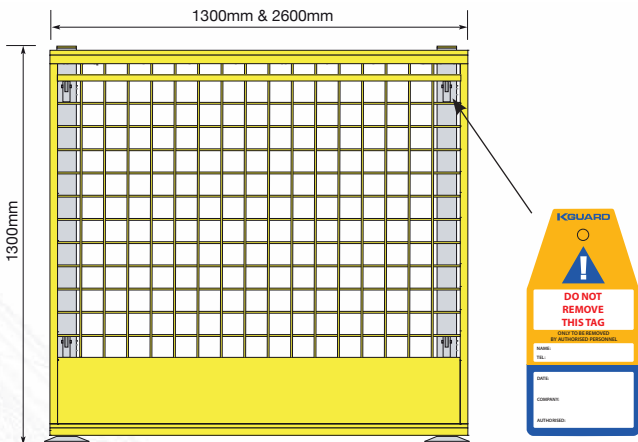


Step 3



⚠ **Always tether your tools and edge protection products.**

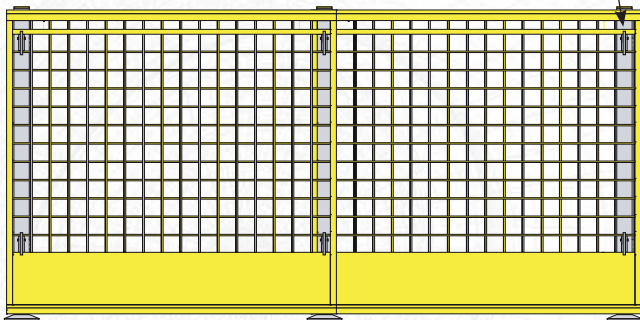
Step 3 cont...



Ensure KGUARD Barrier is installed with the logo side facing toward the posts.

Step 4

Installing additional Barriers



Place the next KGUARD Barrier in position onto post latch housings and engage safety latches as shown in Step 3. It is recommended to have a minimum overlap of one mesh width.

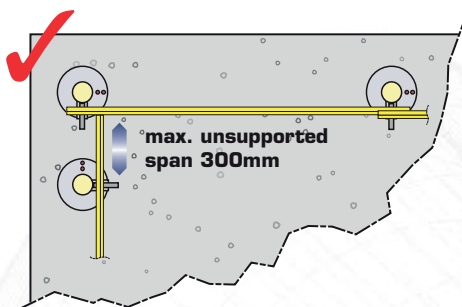
INSTALLATION GUIDE

KGUARD® UK 2020

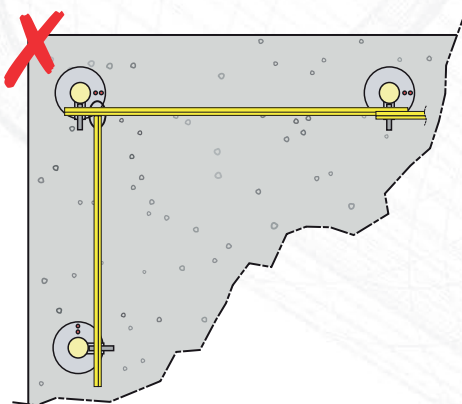
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Safety Guide Do's & Don'ts

Unsupported Spans

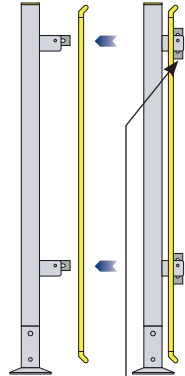
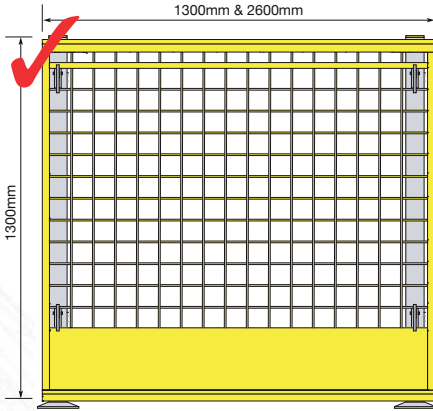


Unsupported spans of KGUARD barrier should not exceed 300mm. Always use two K2 Socket Bases at corners.

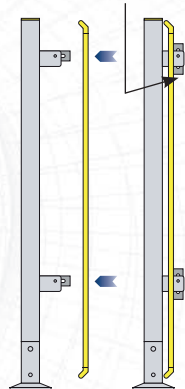
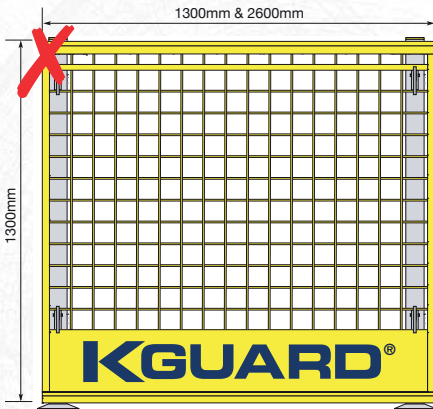


Do not use temporary ties to join an unsupported span to another barrier at a corner. Each panel must be supported by two KGUARD Support Safety Posts.

Panel Orientation



KGUARD Barriers should always be installed with labelled side facing outwards.



SAFETY GUIDE DO'S & DON'TS

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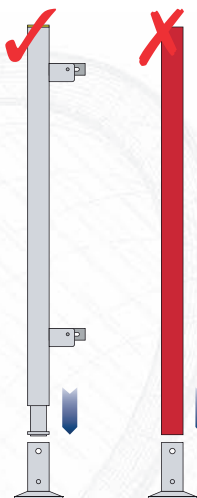
Safety Guide Do's & Don'ts

Foreign Materials

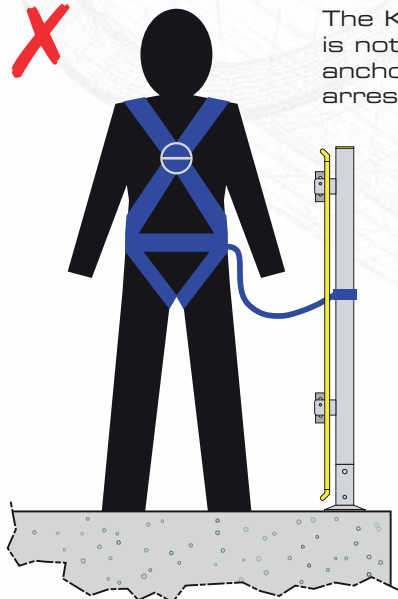
Always use KGUARD approved products with each other.

No foreign materials such as scaffold tube should be inserted into sockets or clamps as the K-Lock system will be ineffective.

Mixing of different systems could result in an unsafe solution and will not comply with BS:EN-13374.

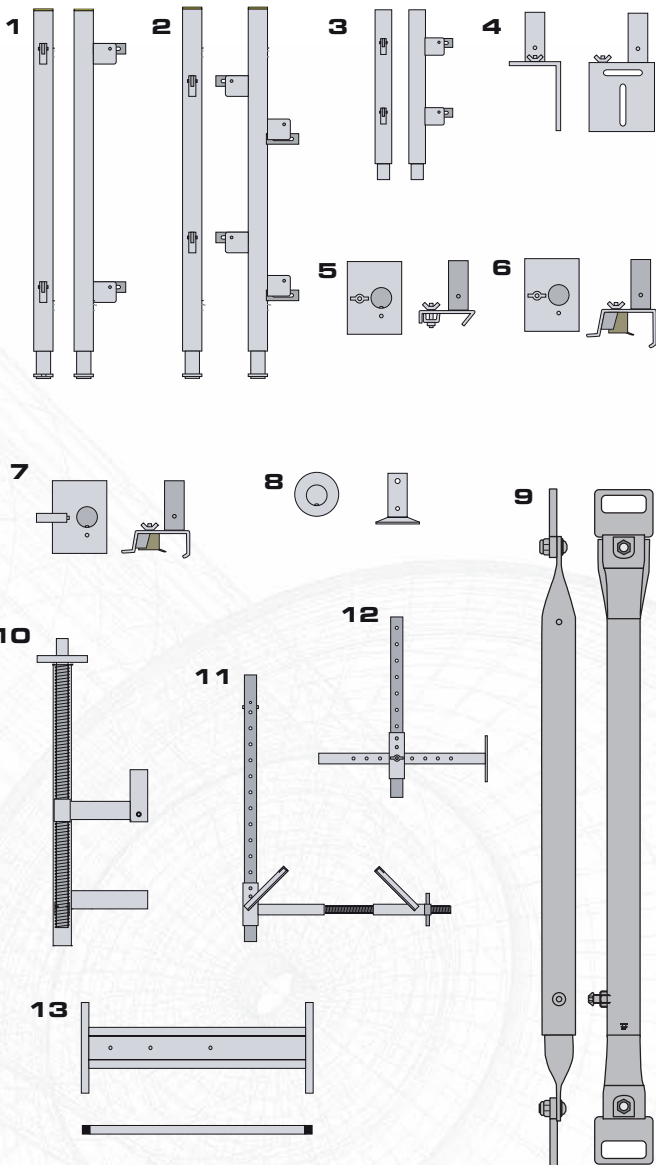


Safety Harnesses



The KGUARD system is not designed for anchorage of fall arrest safety devices.

Component Guide

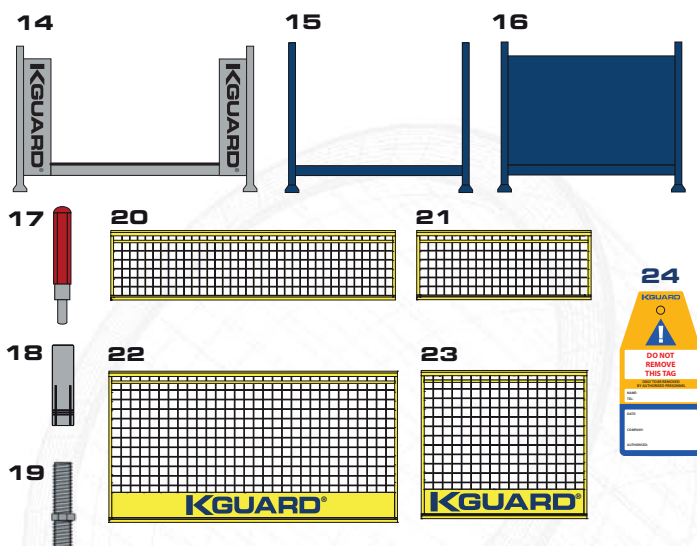


COMPONENT GUIDE

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Component Guide



- | | |
|--|--|
| 1 Support Safety Post
Code: 000003 | 13 Counter Balance Footplate
Code: 000083 |
| 2 Multi Application Post
Code: 000068 | 14 Guard Barrier Storage Unit (Galv)
Code: 000109 |
| 3 Top Post Extension
Code: 000071 | 15 Standard Stillage
Code: 000015 |
| 4 Adj. Slab Edge Bracket
Code: 000047 | 16 Standard Storage Container
Code: 000014 |
| 5 Aluminium Beam Clamp
Code: 000010 | 17 Anchor Setting Tool
Code: 000026 |
| 6 Peri Timber Beam Clamp
Code: 000012 | 18 M16 Anchor
Code: 000025 |
| 7 Doka Timber Beam Clamp
Code: 000080 | 19 Threaded Stud
Code: 000027 |
| 8 K2 Socket Base
Code: 000016 | 20 2.6m Extension Barrier
Code: 000007 |
| 9 Adjustable Link Bars
Code: 000034 (0.8m - 1.5m)
Code: 000046 (1.5m - 2.4m) | 21 1.3m Extension Barrier
Code: 000008 |
| 10 Multi Slab Clamp
Code: 000009 | 22 2.6m Guard Barrier
Code: 000005 |
| 11 Adjustable I-beam Clamp
Code: 000042 | 23 1.3m Guard Barrier
Code: 000006 |
| 12 Adjustable I-Beam Attachment
Code: 000076 | 24 Inspection Tag
Code: SUN001 |

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