Working with Concrete Slabs

When working with concrete slabs the barrier protection can be erected in three ways - with socket bases, adjustable slab edge brackets and multi-slab clamps.

Socket Bases

1. Drill a ø20mm hole 70mm deep no less than 220mm from the slab edge. Ensure that sharp, accurate and well-maintained drill bits are used. Blow out any debris from the hole after the drilling stage.

2. Insert the M16 anchor. The anchor must sit flush with the slab surface and not sit above.
3. Set the anchor with the setting tool. Hammer the tool until solid resistance is encountered.

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.
Thread the socket base into the anchor until the base section is sitting flush with the concrete surface.

Tighten the socket base with the KGUARD® spanner until fully tightened.
**Adjustable Slab Edge Brackets**

1. Place the adjustable slab edge bracket into position and fix the bracket with 2 x 12mm bolts to stop any possible rotation.

**Multi-Slab Clamp**

1. Fit the clamp flush with the slab and tighten the jack nut. Use a hammer to fully tighten the jack nut.

2. Ensure the clamp is vertical when fully installed.
Working with Formwork Deck

Protection can be provided with two types of Aluminium beam clamp and Timber beam clamps.

**Clamp Types**
- Secondary aluminium beam clamp
- Primary aluminium beam clamp
- Secondary timber beam clamp
- Primary timber beam clamp

**Fitting**

**ALUMINIUM**

1. **Ensure beam clamp lip is fully engaged.**

2. Slide nut assembly until "U section lip" bracket engages then tighten nut and tap with hammer until resistance is met.

**TIMBER**
The centres of the Aluminium and Timber beam clamps should be at least 150mm in from the end of the supporting beams. All beam clamps should only be fixed in position to the supporting beams that are at right angles to the Guard Barrier mesh.

A typical scheme is shown. Note the positioning of the two clamp types.

Note: Ensure formwork has been correctly assembled to manufacturer’s specification and all beams are correctly assembled together.

Always use the primary beam clamps for the primary beam fixing and secondary beam clamps for the secondary beam fixing.

KGUARD® barriers fitted to incorrect clamping points would not support the required loading.
Working with Structural Steelwork

Edge protection can be fitted to steelwork using temporary KGUARD® I-Beam clamps, web clamps or pre-fabricated sockets welded to the steel prior to erection. KGUARD® 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.

Fitting the Standard/Maxi I-Beam clamp

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

2 Push fixed jaw against beam flange.

3 Push sliding jaw against beam flange, screw jack nut and hammer tight.
Fitting the Standard/Maxi I-Beam clamp continued...


5. Adjust height of post until Bissel pin sits level with the beam top surface.

Bissel Pin Level with Top of Beam

Move post holder close to edge and bolt. Hammer tighten wing nut.
Adjustable ‘I’ Beam Attachment

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

Pre-fabricated 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.

Note: Welding must be carried out by a competent, suitably qualified mig welder.
KGuard® Installation Guide

Step 1. Safety Post insertion into KGUARD® socket fixings

Insert Safety Post and rotate post in any direction to activate the double K-Lock Safety System.
Step 2. Installation of Guard Barriers onto Safety Posts

Place Guard barriers onto the Safety Post housing bracket then secure by locking the safety post latches into the vertical position. Ensure the Guard Barriers are installed with the toe board label/logo brand side facing towards the Safety Post.
Step 3. Adding Extension Height Guard Barriers

Remove the Safety Post plastic cap and insert the KGUARD® Extension Post. Ensure that the holes of the Extension Post spigot section are correctly aligned with the top hole of the Safety Post and lock in position using the KGUARD® locking pin. Place the KGUARD® Extension Barrier onto the Extension Post housing bracket and lock the safety latches in the vertical position as detailed in Step 2.
Step 4. Optional fixing of the KGUARD® Safety Inspection Tag

Locate and fix the KGUARD® Safety Inspection Tag through the latch plate hole slot with a plastic tie clip or similar.