

The MarroBar is a totally free-standing barrier system tested to BS EN 1317-N1 50mph and approved by the Highways Agency.

It is designed to offer maximum safety. The MarroBar is one of the quickest deployable systems on the market and with up to 200m per load it offers savings on both labour and transport cost. On impact, MarroBar will bring an errant vehicle to a controlled stop. Manufactured from prime UV stabilised polyethylene this provides a versatile yet strong, flexible one-piece system for easy handling and instalment. There is no need for crane lifting machinery for any given emergency set-up.

Deployed with ease, the MarroBar barrier system is locked together in the centre with a steel pin formation and for added strength, two flat steel plates are easily screw fitted making MarroBar a strong and versatile barrier to withstand impacts from errant vehicles. MarroBar barriers are stacked safely and securely with stacking locator points on the top and bottom of each barrier. This allows the barrier to be stacked vertically reducing the cost of transport per metre and reducing storage space.

Length (mm)	Height (mm)	Width (mm)	Water entry (mm)	Water exit (mm)	Weight empty (kg)	Weight filled (kg)	Water fill height
2000	800	500	95	30	60	600	Fill to top

- Correct manual handling techniques should be applied at all times.
- Following a site-specific risk assessment, the correct PPE should be worn at all times
- Extreme Care should be taken at all times whilst working with near traffic.

Base Unit	2 x Side plate
12 x M12 x 25 bolts	Steel hinge pin M6 bolt.

1. Units should be installed on a flat even surface.
2. To start assembly, position the first barrier at its intended final position and line remaining barriers on their intended course. Push each barrier together, interlocking the female pins to male tight together.
3. Once they are in the final position starting at one end place steel hinge pin in top hole and push down until the flat top is flush with the top of the barrier. **Note:** if tight, twist the pin to create downwards movement, barriers may also need to be pulled closer into position for male and female pin to interlock closer.
4. Screw M6 bolt as supplied through hinge pin hole and into insert moulded into top of barrier, tighten with a spanner (**do not over tighten**).
5. For side plate, assemble onto each side of barrier. Prepare 12 x M12 x 25 bolts with a washer on each as supplied. (**Failure to use washers will damage the fixings**)

6. Fit the steel plates each side of the barrier, hand screwing the bolts with washer into the brass inserts located in the recessed areas. **Note:** layout of hole slots on the plates are not mirrored so will only fit one-way dependant on insert layout.
7. Hand tighten each bolt with 10mm allen key (**do not over tighten**).
8. All barriers must be fitted with the steel hinge pin and side plates, all bolts must be tightened before filling with water.
9. **Water filling** fill each barrier by placing water hose in top centre hole, ensure all drain bungs are fitted and tightened accordingly.

Once filled, replace white cap in hole

Press the cap carefully. Make sure a small cable tie is present so the cap does not fall into the barrier. As this may result in blocking the drain hole and may result in customers being charged for missing caps or caps that are inside barriers.

10. Once all barriers are water filled to the top of each, the assembly is complete. **Moving the barriers and pushing the tops into the barrier at this point may cause irreparable damage.**

NO TESTS HAVE BEEN CARRIED OUT ON THE BARRIERS WITH THE PEDESTRIAN AND VEHICLE GATES INSTALLED, SO THE BS EN1317-N1 IS NOT APPLICABLE

Dismantling

1. For dismantling the barriers, firstly undo and take out the drain bung situated at the bottom of each barrier with T bar tool.

Note: all bungs are to be kept and screwed back into the barrier once emptying is complete.

2. Once barriers are empty of water, undo and take off steel side plates. Finally, remove steel hinge pin.

Note: all parts can be re-used, not to be thrown away.

Daily Checks

- The barrier system should be inspected daily checking to ensure:
- Each barrier is retaining water and is full with the filler cap in position.
- That all connecting pins and side plates are fitted.
- Inspect all barriers for damage caused by any unreported impacts.

Impacts

Following an impact, all barriers must be inspected for any signs of damage all barriers must retain water. Barriers with not capable of holding water or where the captive nuts pulled from the body of the barrier must be replaced.

Should the barriers require moving back into their position must be drained of all water; this will enable the barriers to be moved without causing damage. Loosen the side plates to allow the barriers to be returned to their operating position, all hinge pins and side plates must be tightened. The barrier can then be refilled with water and the **white filler caps replaced**.

Additional information

Each barrier has 3 raised spigots on the top of each long side. This is for stacking purpose, and will locate into female sections at the bottom of each barrier. To ensure safe stacking, each location point must be interlocked into the bottom of the above barrier.

GUIDE TO INSTALL PEDESTRIAN AND VEHICLE GATES ARE ATTACHED BELOW

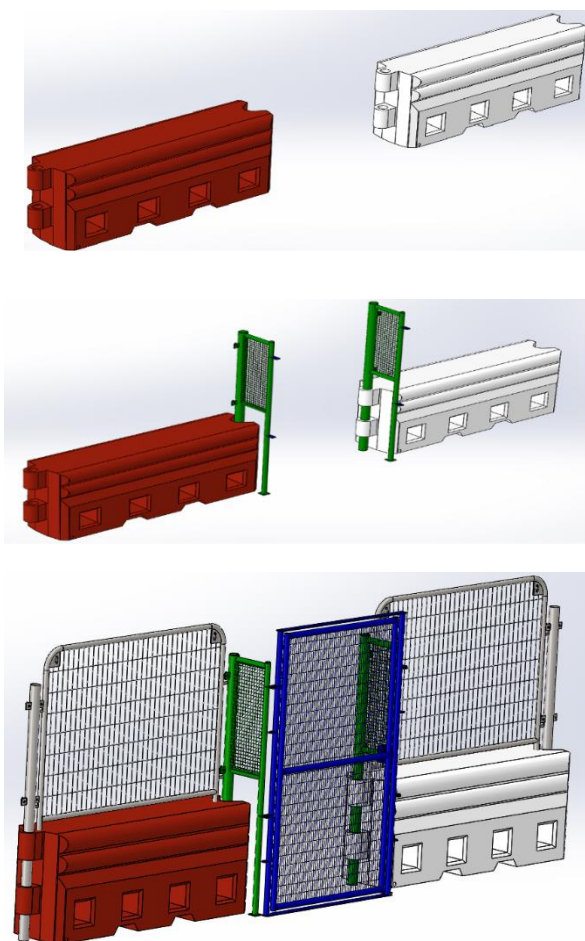
Marrobar Fence Panel



Anti-luce fixing present on post lugs. If fence panels are used, the posts will replace the steel hinge pins.

Note: Customers must not add signs or banners to the fencing as this will increase the wind resistance of the fencing.

MARROBAR with PEDESTRIAN GATE

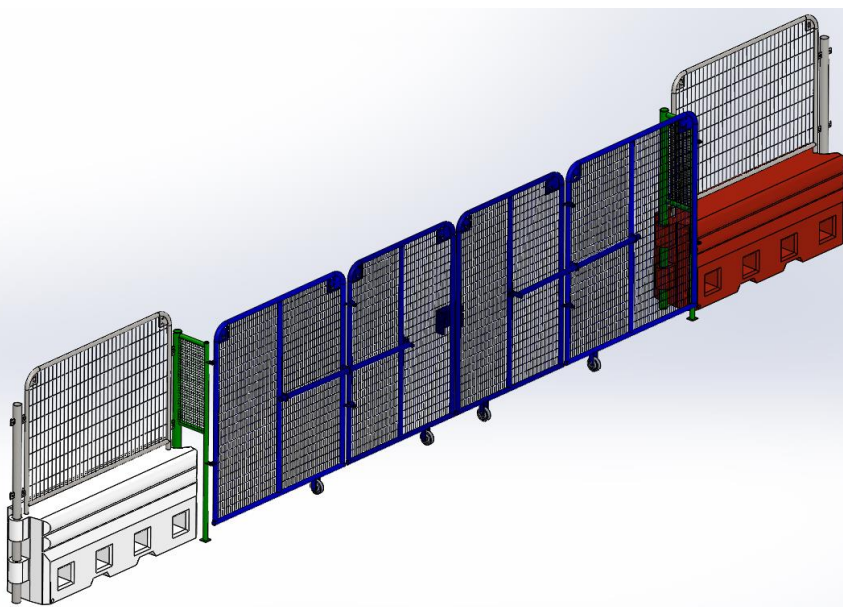


Post required: 2 x **RB22GATEPOST(HIRE CODE)** / **RB22 - GATE POST(SALES CODE)**

Fixings required for gate: 4 X M12 X 35, 4 X M12 Nut & 4 X M12 Washer

If fence panels are used, the posts will replace the steel hinge pins

MARROBAR with BI FOLD VEHICLE GATE - 6M (PAIR)



Post required: 2 x **RB22GATEPOST(HIRE CODE)** / **RB22 - GATE POST(SALES CODE)**

Fixings required for gate: 4 X M12 X 35, 4 X M12 Nut & 4 X M12 Washer

If fence panels are used, the posts will replace the steel hinge pins