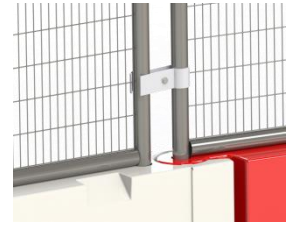
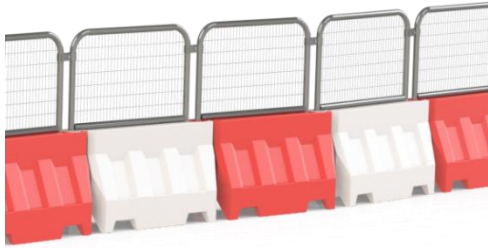


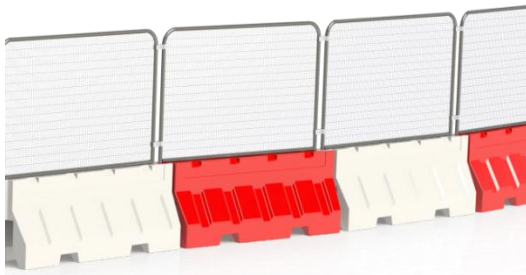
INSTRUCTIONS FOR UNIVERSAL BARRIERS WITH FENCE PANELS & GATES

1.0 Universal barriers with fence panels

1m UNI barrier (empty 8.5kg / 36.5L of water) with fence panel (5.8kg) c/w 1 clip



2m UNI barrier (empty 25kg / 161L of water) with fence panel (14kg) c/w 2 clips



1.1 Safety Advice

- 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 near traffic.

Male Terminator

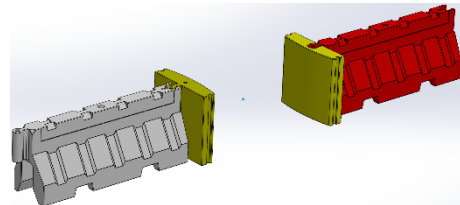
Empty weight: 14.2kg

Amount of water it can hold maximum: 124L

Female Terminator

Empty weight: 14kg

Amount of water it can hold maximum: 104L



1.2 Deploying the system (Designed for a 2 man lift operation)

- a) Units should be installed on a flat even surface.
- b) To start assembly, position the first barrier at its intended position and line up the remaining barriers on their intended positions. Push each barrier together, interlocking the female to the male part together.
- c) **Water filling:** Fill each barrier to either fill line or to the overflow by placing a water hose in the top centre hole. Ensure that both sides of the barrier legs are filled appropriately. Top up if required. Using the tools provided, ensure all drain bungs are fitted and tightened accordingly.
- d) **Once filled, replace the white cap in the hole and press the cap carefully. Make sure a small cable tie is present so the cap does not fall into the barrier. This may result in blocking the drain hole and may result in customers being charged for missing caps or caps that are inside barriers.**
- e) If fence panels are required with the barriers, they can be placed on the barriers by slotting them into the holes. Use the appropriate clips if supplied, 1m fence panels, 1 clip, 2m fence panels, 2 clips to secure. (see pictures above) (all clips additional optional extras).
- f) **Moving the barriers and pushing the tops into the barrier at this point may cause irreparable damage and is chargeable.**

1.3 Wind Test Results - BS8442 A (58.83mph) B (39.37mph) C (19.46 mph)

Product	Empty weight* of barrier (kg)	Weight* inc water (kg)	Formation of test	Total test weight* (kg)	Test A	Ballast added to Pass Test A	Test B	Ballast added to Pass Test B	Test C	Ballast added to Pass Test C
1m Uni Barrier	8.5	45	3 connected barriers	135	66.8 mph					
1m Uni Barrier c/w fence	14.3	52	3 connected barriers	156	55.6mph 23.3 +10kg ea 24.3 +20 ea 25.5					
2m Uni Barrier	25	186	2 connected barriers	372	59.8 mph					
2m Uni Barrier c/w fence	42	206	2 connected barriers	412	48.5 mph 54.4 mph +20kg = 56.3 +40kg = 58.6	+40kg				
2m Uni Barrier c/w fence and netting	39	200	2 connected barriers	400	Achieved 38.5mph					

*weight values are from calibrated load cell
The tests were carried out with water filled barriers

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

1.4 Dismantling (Designed for a 2 man lift operation)

- a) To dismantle, undo clips and take off fence panels carefully.
- b) For the 2m barrier only, take out the drain bung with the bung key tool and empty it safely.
- c) When parting barriers, ensure that they are cautiously and vertically lifted to prevent damage.

Note: All bungs are to be kept and screwed back into the barrier once emptying is complete.
Note: all parts can be re-used, not to be thrown away.

2.0 2m Universal barriers with fence panels and vehicle gate (Assembly not wind tested)

It is advised to position and set up the gate (allowance of 6.3m width) at the desired location and then installs barriers on each side by following instructions in section 1.2

Please note there is a male and female terminator buffer end part for the gate.

This gate system is not compatible with the 1m Universal barrier.

For operational reasons and generally, one of the UNIVERSAL 2000 GATE POST and the UNIVERSAL 2000 GATE POST INFILL will already be joined together before delivery. This may not be possible at times, the fixing required is 4 x U-Clamp M8x60+nut

The installation requires a minimum of two operatives.

Posts required:

2 x UNI2000GPOST (**HIRE CODE**) / UNI2-GPOST (**SALES CODE**)

1 x UNI2000GPOST INFILL (**HIRE CODE**) / UNI2-GPOST INFILL (**SALES CODE**)

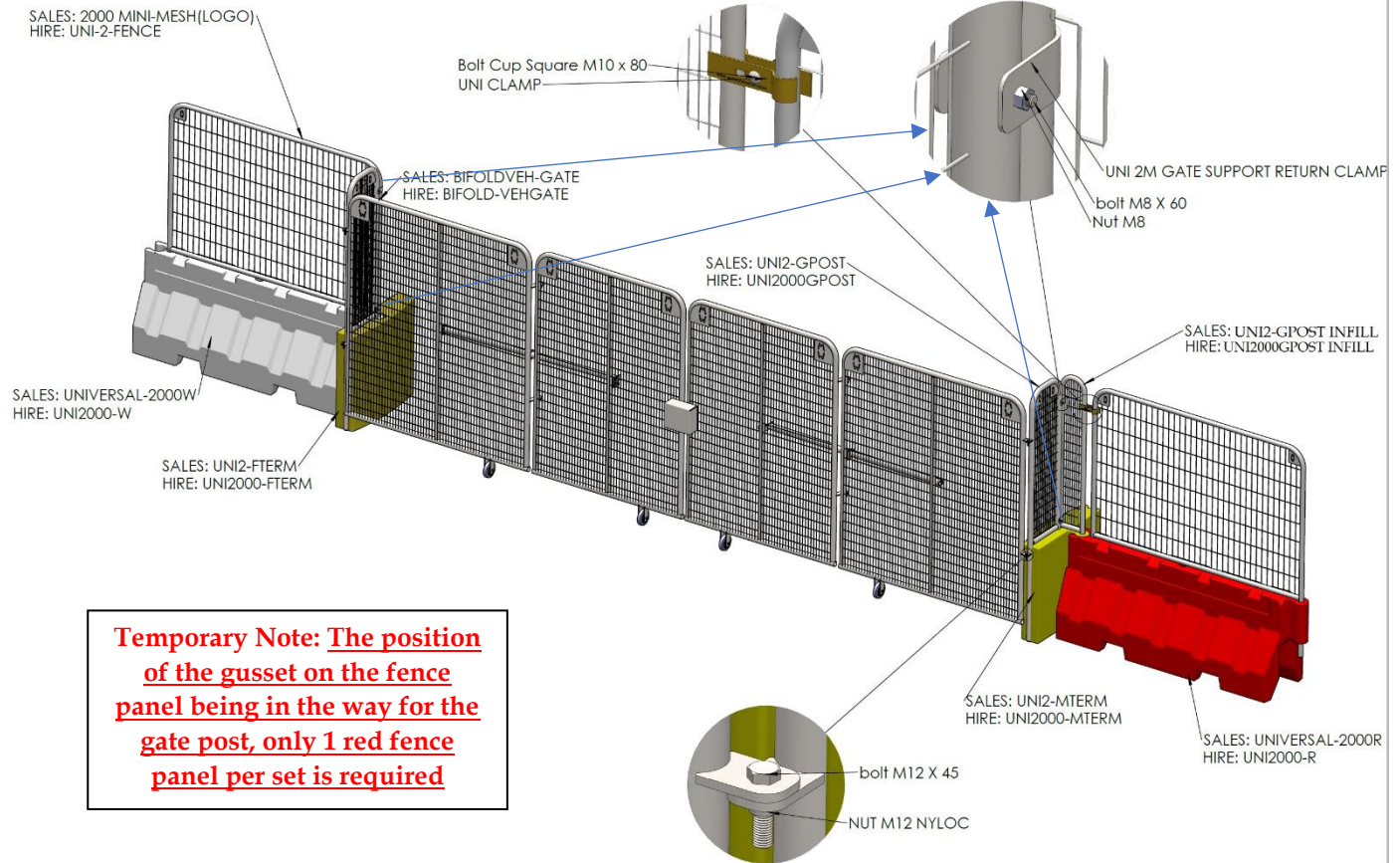
Fixings required for gate:

4 x M12x45+Nyloc Nut for attaching to gate

4 x U-Clamp M8x60+nut for the infill panels

1 x UNI Clamp with cup square bolt M10x80+nut

The gate requires only two empty UNI barriers (one on each side with buffer ends) to have a secure gate system. It is recommended to add water to the barriers up the fill line/hole to increase the stability of the system.



Temporary Note: The position of the gusset on the fence panel being in the way for the gate post, only 1 red fence panel per set is required

3.0m Universal barriers with fence panels and pedestrian gate (Assembly not wind tested)

It is advised to position and set up the gate (allowance of 1.5m width) at the desired location and then install barriers on each side by following instructions in section 1.2

Please note there is a male and female terminator buffer end part for the gate.

This gate system is not compatible with the 1m Universal barrier.

For operational reasons and generally, one of the UNIVERSAL 2000 GATE POST and the UNIVERSAL 2000 GATE POST INFILL will already be joined together before delivery. This may not be possible at times, the fixing required is 4 x U-Clamp M8x60+nut.

The installation requires a minimum of two operatives.

Posts required:

2 x UNI2000GPOST (HIRE CODE) / UNI2-GPOST (SALES CODE)

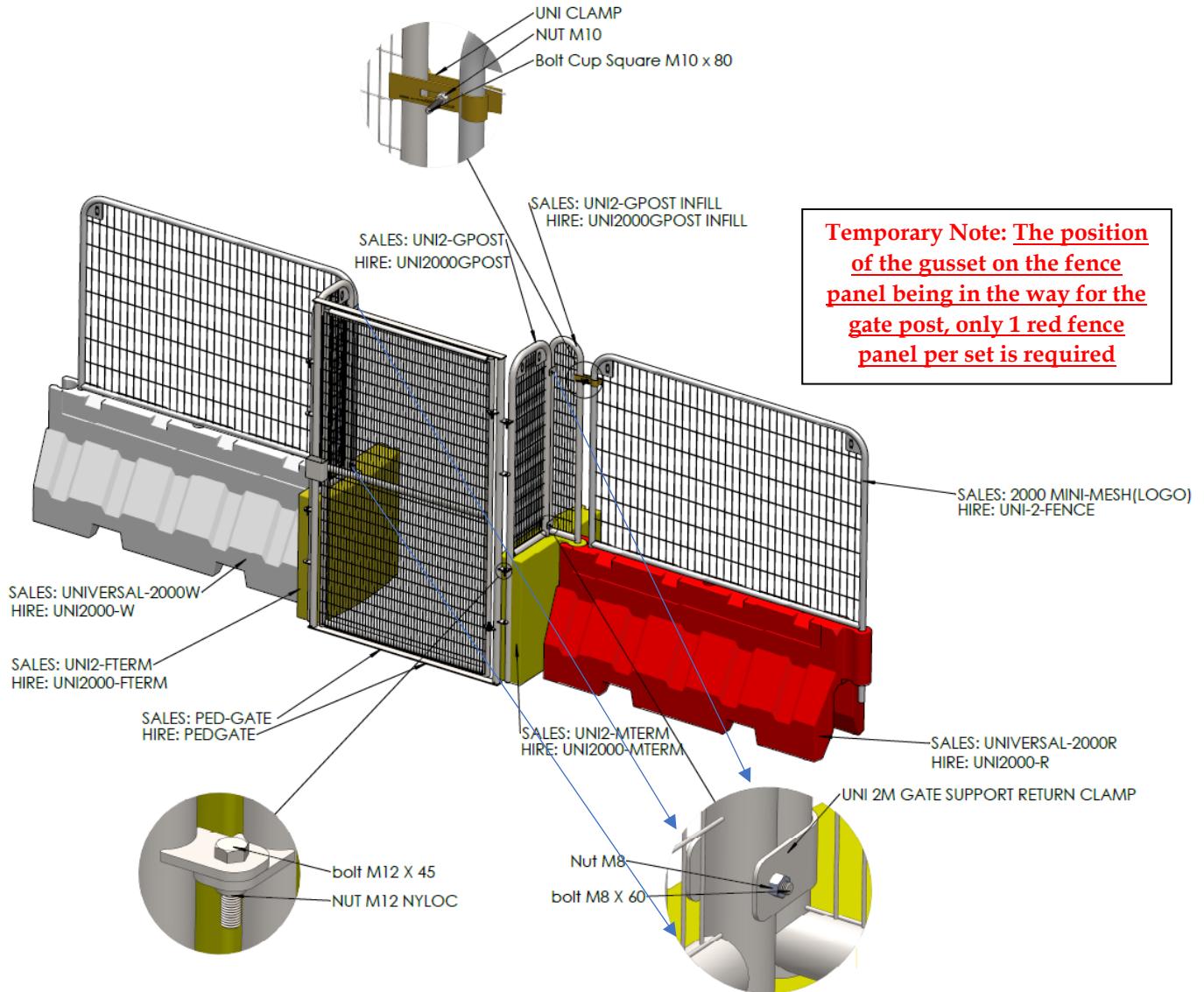
1 x UNI2000GPOST INFILL (HIRE CODE) / UNI2-GPOST INFILL (SALES CODE)

Fixings required for gate:

4 x M12x45+Nyloc Nut for attaching to gate

4 x U-Clamp M8x60+nut for the infill panels

1 x UNI Clamp with cup square bolt M10x80+nut



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 clips and fence panels & barriers are not damaged.

Discolouration of the fence may occur due to oxidisation.

Marwood Note!

Marwood Group Ltd always recommends that a site survey and a full risk assessment must be carried out before using the equipment.

It is the end user's responsibility to make sure the system is suitable for their intended use. The system must be installed by an experienced and competent person.

No tools supplied. Customers must use appropriate tools based on the size bolts/nuts supplied.

Contact your local Marwood Group Depot, for replacement & repair to the system and its components.