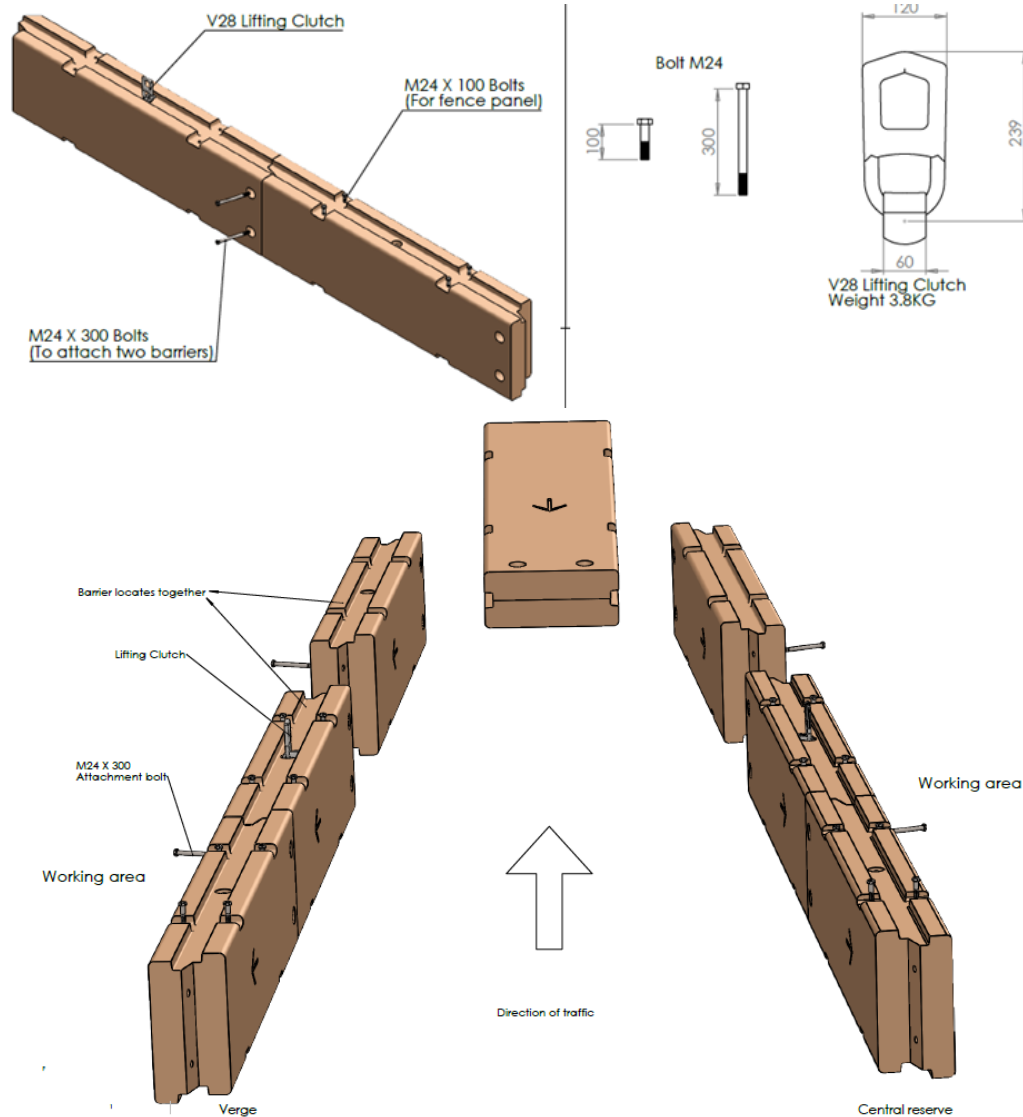


General Information for V28 TVCB

Before any work commences, a site-specific risk assessment must be carried out. This should include the right PPE to use, surrounding traffic, the ground condition, elevation or inclination. To meet the requirements of BS EN 1317:2010, all barriers must be linked together and bolted down with appropriate fixings. Units' performance will achieve N2 & W3 rating with a minimum of 63m of barriers. The weight of the V28 TVCB is 2500kg. Length is 3000mm, height is 800mm and width is 450mm.



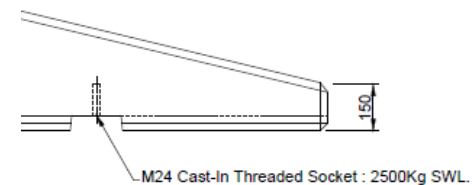
Installation guide (1)

1. With the required number of concrete blocks in place next to each other using the lifting clutch (inspect anchor pin before and after use to detect security concern) or fork lift.
2. Use all correct fixings and components to secure the blocks next to each other (M24 x 300).
3. Repeat the above process in step 1-2 for the desired length of barrier.
4. Carry a final check on all lifters, bolts, nuts and blocks.

Installation guide (2)

Units should be bolted together using approved joining kits and where appropriate, both the leading and the end terminators with the next three intermediate units should be anchored to the carriageway.

Securing the Terminal unit to ground



Risk assessment

NOTE: Check to see if a full lifting plan is required

Generic Risk assessment & method statement

Description	Persons at risk	Control measures	Prob	Sev	Risk factor
Injury from falling objects	Driver/ pedestrians	All persons not within the vehicle cabs to wear hard hats. All chains/lifting equipment to be certificated. TVCBs to be lifted using fork-mounted hook attachment (or suitable chains & hook) and lifting shackle*. The lifting shackle will on hire/supplied by Marwood Group Ltd. Operator to be certified in the use of the tele-handler/crane/ excavator/etc. Tele-handler/crane/excavator/etc. to have a suitable SWL and Certificate of Thorough Inspection. In the case of pre-used blocks, check the galvanised lifting pin for signs of wear, corrosion or damage prior to lifting. Check the shaft diameter of the lifting pin (5t Pin = 20mm) and that the pin is not leaning or bent. TVCBs should not be lifted with forks from underneath. Never stand under a suspended load.	1	5	5
Injury from collision with vehicle	Driver/ pedestrians	All persons not within the vehicle cabs to wear hi-vis. All vehicles to be fitted with reversing alarms.	2	4	8
Fall from height	Driver/ pedestrians	Vehicles must have have side rails fitted. Access and egress to vehicle's stepladder.	3	3	9
Injury from vehicle turning over	Driver/ pedestrians	Drivers to check terrain before beginning operations.	1	3	3
Trapped fingers	Pedestrians	Operators to position TVCBs via flat sides, not in between colliding TVCBs. Gloves must be worn.	1	5	5
PPE required		Safety boots, hi-viz, gloves, fall-arrest harness/lanyard, hard hat, site-specified extra PPE.			

Example: Mechanical off-loading / loading of TVCBs from flatbed articulated trailers using a tele-handler/crane or similar with lifting chains

V28 Risk Assessment

Assessment guide table

Hazard probability (prob)	Factor	Hazard severity (sev)	Factor
Highly unlikely	1	Insignificant	1
Remote possibility	2	Minor - light damage	2
Fair chance	3	Moderate - damage / injury	3
Highly probable	4	Serious damage / injury	4
Almost certain	5	Dangerous - fatal	5

Risk factor calculation

Risk factor = Probability factor × Severity factor

Risk factor	Category	Action
1 - 5	Acceptable	Routine action
6 - 10	Acceptable	Employ safety systems
11 - 15	Marginal	Reduce risk / Employ all safety systems
16 - 20	Undesirable	Maximum caution / Close supervision
21 - 25	Unacceptable	Must not be allowed

Maintenance

The pin anchor on the V28 must be thoroughly examined to detect wear/damage/security concern before and after each lift.

Carry daily checks on the complete barrier system including blocks and security fixings. Check that all fixings are tightened and secured.