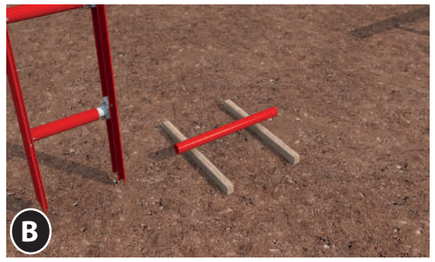
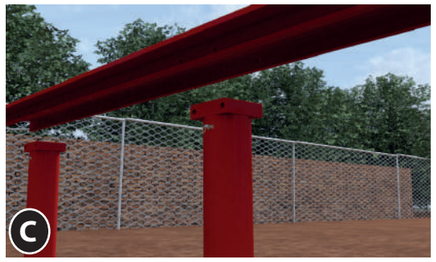


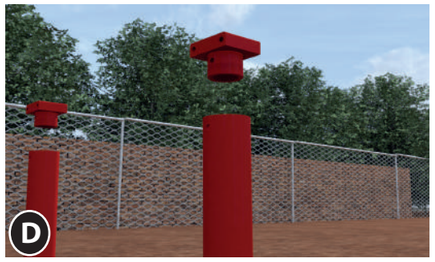
A Vertishore will be supplied pre-assembled, comprising of 2 Vertishore rails connected via a pair of hydraulic struts.



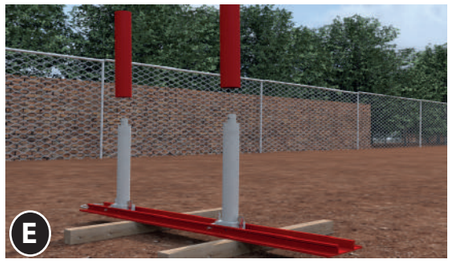
B Strut extensions can be used with the hydraulic struts to allow for the maximum trench width.



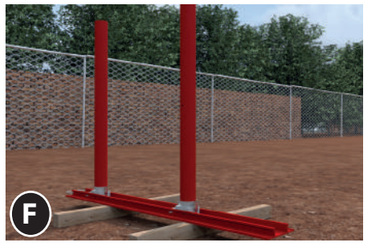
C To add on strut extensions you must first take out the pin that connects the vertishore rail to the strut and remove the rail.



D Remove the socket pin and the socket pad, repeat for the other cylinder.



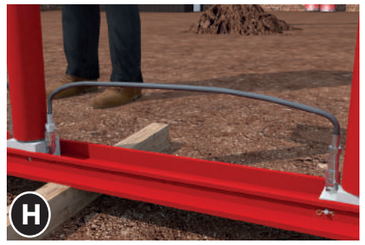
E The cylinder sleeve can now be removed.



F The cylinder extension can now be sleeved over the rod and pinned through the rod end. Re attach the socket pad to the new extension and pin through. The strut can now be re-connected to the Vertishore rails.



G Vertishores should always be carried with fingers at the outside of the rail, away from the cylinder pivot points.



H Installation commences by laying the Vertishore down with the fitting side of the cylinder on the lower rail. The hose fitting will connect to the quick release valve on the cylinder. There is a short hydraulic hose to connect the 2 Vertishore struts, when the top strut is being pressurised the bottom strut will also extend by the same amount.



I Two different tools are used to position and install the Vertishore, the release tool and the removal hook.



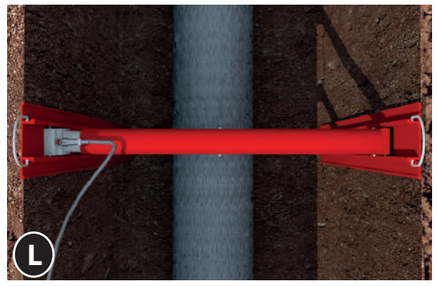
J Pick up the handle and the valve release tool and walk the shore into the trench. The Vertishore is installed by carefully using the lowering hook to open the Vertishore as it is lowered into the excavation.



J



K When the shore is properly positioned, begin pumping the fluid into the strut to pressurise the rails against the soil face using an MGF bucket pump.



L Pump out ensuring it sits square and vertical, against both faces with continuous vertical contact on the exposed faces. (re align, pack out if necessary). Do not over pressurise (max. pre-load 750 psi).



M Install the other Vertishores - normally a minimum of 3 are required at 1.2m to 1.5m centres dependant upon soil conditions.



N NB : If small areas of the vertical faces are unstable, ply boards should be used between the vertishore and the trench face to prevent localised collapses and/or the centres reduced.



O Inspect the full installation ensuring that there is no evidence of instability along the unsupported faces and edges.



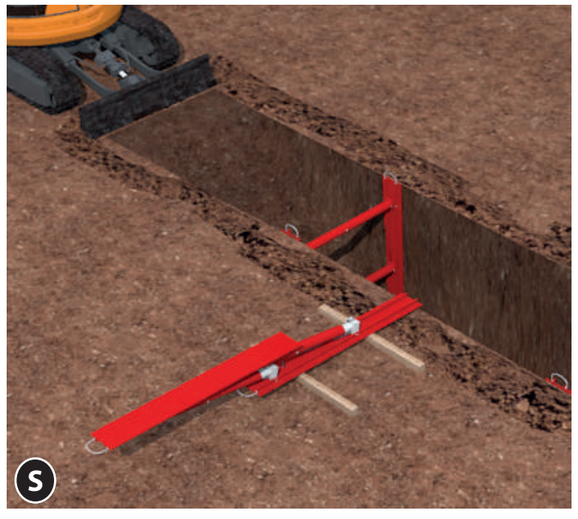
P The removal of the Vertishore should be closely followed with the backfilling of the trench. The pressure within the hydraulic struts must first be relieved by using the valve release tool on the strut valve.



Q As the Vertishore retracts the worker will catch the shore with the removal hook. Hold the Vertishore rail farthest away with the removal hook and allow the shore to fold close. As the Vertishore closes the fluid within the cylinder will be released from the hydraulic coupling.



R Walk away from the trench and pull the shore out.



S The Vertishore should then be stacked on timber skids in a closed position. The other Vertishores can now be removed before backfilling can be completed.



Vertishore rail & Socket pad detail.



Cylinder sleeve & Rod pin detail.



Quick release valve hose fitting detail.



Valve release tool strut valve detail.

T Maintenance

Prior to permitting entry always ensure:-

- Vertishores are installed plumb, square and level to each other.
- All components are fitted and show no signs of damage, distress or fluid/pressure loss
- Safe means of access/egress is provided from within the excavation

U Removal

Removal is a reverse of installation ensuring material is backfilled and compacted as extraction proceeds

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GENERAL

Current health and safety legislation requires that construction equipment users formulate a site specific Safe System of Work (SSoW) to undertake the works they are proposing. This document is intended to provide sufficient product specific guidance on handling, installing, maintaining and removing MGF equipment to allow the SSoW to be compiled. It should always be read in conjunction with the product specific technical files and the site specific design information (including any residual risks to be managed on site) provided by MGF or others.

Users of this equipment should be both familiar with and competent in its use. MGF can provide toolbox talks and training material / advice on request.

MGF excavation systems can be supplied with a full range of site safety products and ancillaries. These products are designed to comply with current best practice and meet the requirements of the Lifting Operations & Lifting Equipment Regulations, Work at Height Regulations and the Confined Spaces Regulations.

For MGF contact details or further information visit.
www.mgf.ltd.uk

⚠ SAFETY TIPS ⚠

1. Always inspect lifting points prior to every lifting operation and ensure all personnel are well clear of operation.

2. Beyond 1.0m depth, only access the excavation via a secured ladder placed within the frame. Never enter via the ends/faces of an unsupported excavation at greater depths.

3. Always ensure all pins and retaining clips are correctly fitted prior to use.

4. Do not allow personnel to enter the excavation whilst excavator is digging.

5. Always work from a position of safety. Avoid working above on an unsupported edge, an unprotected edge or under a suspended load.

6. Ensure isolation valve is always closed once struts are pre-loaded.

7. Do not pre-load/pump out hydraulics beyond 750 psi/50 bar using MGF bucket pump.

8. Always release hydraulics before removing Vertishore.

9. Do not extend struts beyond their stated working range.

10. Always install the Vertishore as soon as possible after the trench is excavated to minimise the risk of the trench faces collapsing.

IF IN DOUBT ASK!

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Guidance for Safe Systems of Work: Vertishore Installation

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