

**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](http://www.mgf.ltd.uk)

**SAFETY TIPS**

1. Panels are very heavy and great care must be taken in selecting a suitable excavator for handling, installing and extracting.
2. Always use MGF specified lifting chains when lifting and handling the boxes or components.
3. During lifting or extraction operations ensure personnel are well clear of the equipment.
4. Customer must ensure that prior to use checks are made confirming that the installed panels can each bear a minimum 75mm onto the walers or the trench box panels either side of the trench. In addition the panels must be square and plumb with soil packed evenly against the back face to ensure the panels cannot slip, slide or rotate during the proposed works.
5. It is recommended that the backfill extends to a minimum 0.5 x the depth of the trench.
6. Always inspect lifting points prior to every lifting operation.
7. Always work in position of safety. Avoid working above on an unsupported edge, an unprotected edge or under a suspended load.
8. Avoid standing on steel panels especially when wet.
9. Keep hands and fingers away from pinch points when making connections.
10. Do not stack steel on steel.

**IF IN DOUBT ASK!**

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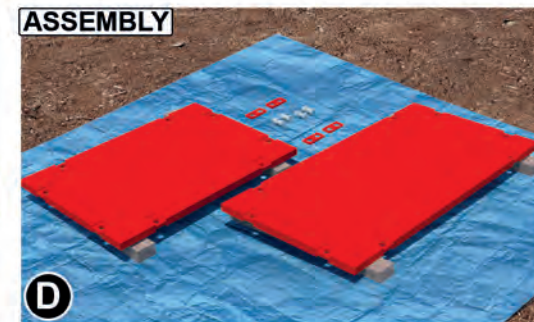
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**Guidance for Safe Systems of Work:**

**Endsafe Panels SSoW**

Drawing No. **GSSW/06.2A** Rev **A1**  
Date of first issue **04.07.2017**

**ASSEMBLY**



Before use inspect all components, if 2 Endsafe panels are to be connected then ensure that 4 connector plates and 4 M30 bolts and nuts are provided.



Prior to use ensure that the panels will bear a minimum of 75mm onto either side of the box system when installed.



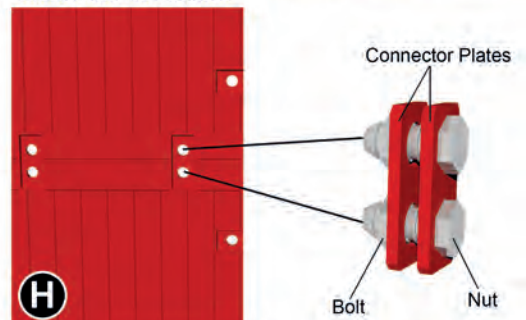
To connect the panels simply position one of the connector plates on the top face over the 2 panels. Keep hands/fingers away from connection and pinch points.



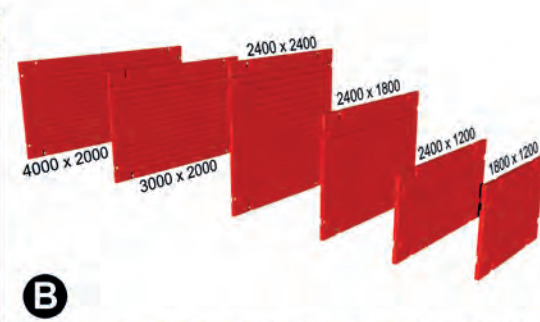
The other connection plate should be offered to the underside of the lifting points.



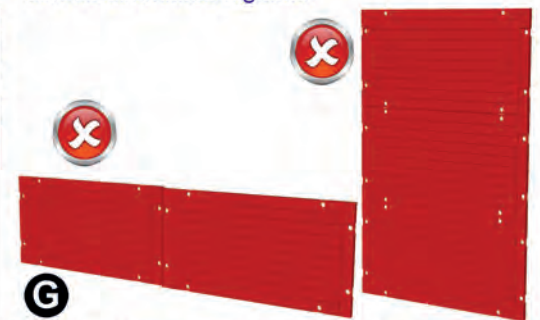
The panels are very heavy and great care must be taken in selecting a suitable excavator for handling, installing and extracting. If panels are to be joined together then this might affect the excavator selection.



Both panels are connected by butting up against each other and assembling the connector plates around the lifting points on the panels.



The panels are available in various sizes to suit a wide range of MGF products. The system is generally suitable for trench depths of up to 4.8m and widths of up to 4.0m. Up to 2 panels can be connected together.



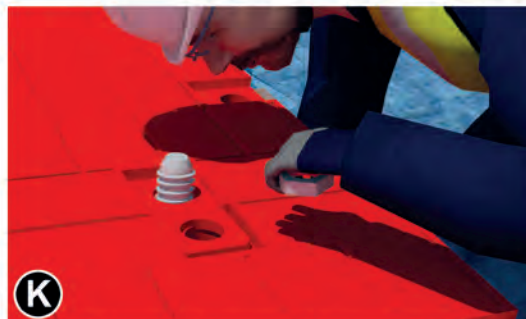
The panels can be connected together in various configurations, no more than 2 panels must be connected together. If connecting together the 2 panels must be stacked on top of each other and connected prior to installing.



MGF Endsafe panels are designed to be installed quickly and easily using an excavator and lower technique. They are designed to support the open ends of trenches created using MGF Box Systems.



It is recommended to slightly batter back the open face where the Endsafe panel is to be installed, this will make it easier to lower in place.



Whilst holding the lower plate insert one of the bolts from the underside and attach a nut on the protruding bolt end, this can be hand tightened to constrain the lower plate.



The other bolt and nut assembly can now be connected, ensure both bolts are sufficiently torqued. Repeat this process with the other connection point.



Once both sets of plates are connected. The panels are ready to be installed. Ensure that the excavator has the required reach to be able to safely handle and install the assembled panels. Take care not to bend the connectors.



Carefully lower the panels in position, the panels may need to be gently pushed into place. Do not use excessive force during the installation, to avoid damaging the connecting plates.



Ensure that the Endsafe panels bear onto the side of the box panels, and not the struts.

Desc. (L x H)	Product ID	Weight (kg)	Panel SWL (kN/m <sup>2</sup> )
1800 x 1200	4.191	225	45
2400 x 1200	4.192	290	45
2400 x 1800	4.193	410	45
3000 x 2000	4.194	510	45
2400 x 2400	4.196	380	45
4000 x 2000	4.195	845	45



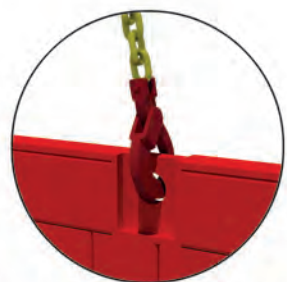
Once installed the void behind the panel can be partly backfilled to ensure the panel cannot move.



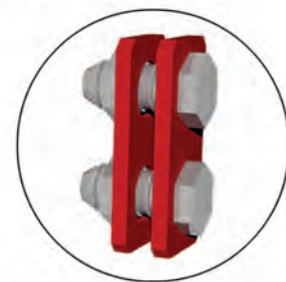
Once the work is complete the Endsafe panel should be extracted by first excavating the previously filled material from behind the Endsafe panel.



A 2 leg chain should now be attached to the top 2 lifting points and the panel should be carefully extracted. Do not snatch chains and avoid bending the connector plates. The connector plates can now be removed and the panels stacked securely on timber skids.



Lifting / Connection Detail



Connection Plate Detail

See MGF [YouTube](https://www.youtube.com/user/MGFLtd) channel for installation guidance:  
<https://www.youtube.com/user/MGFLtd>