

GROUNDWORKS **END PANELS** User Guide



GENERATION
HIRE & SALE

End Panel for Trench & Manhole Boxes

This booklet is intended to provide basic information for users of the Generation UK Hire End Panel and to draw the client's attention to the aspects of handling, assembly, installation and use which need to be considered in compiling a safe system of work. In particular, the client's attention is drawn to the size and weights of the individual components and the need for planning the lifting operations involved.

All the End Panels have lifting points for safe slinging. The End Panel is only intended for use in conjunction with a Trench Box or Manhole Box and is NOT to be used for any other purposes. This booklet should be read in conjunction with the appropriate User Information for Trench Boxes and Manhole Boxes.

Design

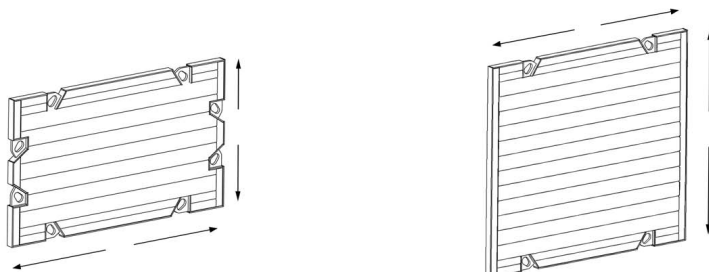
The End Panels have been designed for a Maximum Earth Pressure of 36.4 kN/m². Users are advised to check that their excavation arrangement will not impose greater working pressures. Conditions which will increase the likelihood of trench wall instability and lateral earth pressures are:

- a) Close proximity of structures.
- b) Excavated or construction materials adjacent to the trench.
- c) Close proximity of site roads.
- d) Close proximity of railways.

The End Panels are designed for use on closed ends of excavations where pipes or services do not extend beneath the panels. They are not connected to the Trench or Manhole Boxes and do not seal the boxes against water ingress.

WARNING: During installation of the End Panel, Trench and Manhole Boxes can slide longitudinally in certain ground conditions.

Component Identification



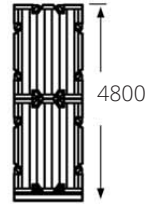
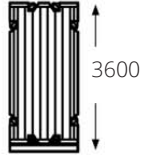
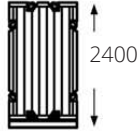
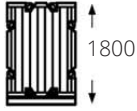
Code	Height & Width (mm)	Weight (kg)
084794	1800 x 1200	197
084795	2400 x 1200	242

Code	Height & Width (mm)	Weight (kg)
084796	2400 x 1800	385
084797	3000 x 2000	495

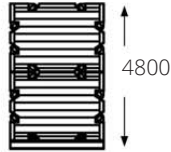
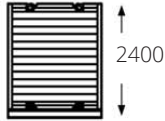
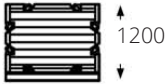
Typical Assemblies

Note: The maximum useable depth is 4.688m. Consisting of 2 No. 2.260m high Panels

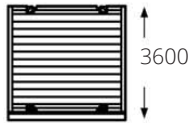
1200mm Wide Arrangements



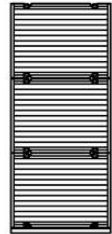
1800mm Wide Arrangements



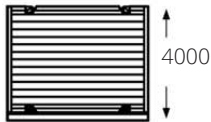
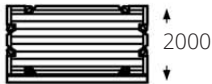
2400mm Wide Arrangements



Note:
End Panels are NOT to be assembled or installed 3No. Panels high. If a height is required that is greater than shown above please contact Generation UK.



3000mm Wide Arrangements



End Panel for Trench & Manhole Boxes

Manpower

The Health and Safety Regulations require that personnel deployed are suitably trained, experienced and supervised by a competent person.

Plant for Lifting

A suitable appliance is required for off-loading and assembly if required. The machine lifting capacity and clearance under the lifting point should be checked against the sizes and weights of the End Panel to be lifted / assembled. **WARNING** : If an excavator is being used for lifting operations, refer to safety information in Generation UK's "Lifting Chains" User Guide.

Lifting Chains

Lifting chains of suitable length and capacity complete with current certification. Typically a set of 4 leg 13mm chains with 4m leg length complete with safety hooks and shortening clutches. Refer to Lifting Chain User Information for more details.

Access and Hard Standing Areas

These include:-

Suitable area to off-load the lorry.

Suitable hard standing for the machine to operate to lift the End Panel into position.

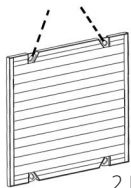
Ladders and possibly other provisions to provide safe access into and out of the trench.

Supply of Equipment to Site

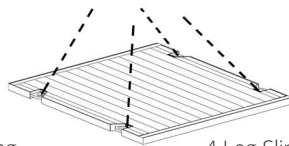
Generation UK will normally supply End Panels as individual components ready for site assembly.

Return of Equipment Off-Hire

Clients should ensure that on removal, the equipment is returned in sections as supplied.



2 Leg Slings



4 Leg Slings

Stacking and Transportation

End Panels should be stacked with suitable timber dunnage. (Max. 6 Panels per stack).

Panel Connectors and pins should be stored in bins.

When transported End Panels should be securely assembled together and restrained to the vehicle bed.

During transportation, stacks and bins should be securely restrained to the vehicle bed.

Stacking and Transportation

When not in use, ALL End Panels should be stored horizontally.

Use of End Panels

Maintenance

Regularly check that the Connector Pins and Panel Connectors are fitted and tight.

Do's & Don'ts

- DO - Ensure that all operatives are familiar with the safety and operating instructions.
- DO - Check that the Connector Pins and Panel Connectors are always fitted and tight.
- DO - Follow the basic maintenance instructions.
- DO - Wear a safety helmet.
- DO - Use suitable 4 leg chains and lifting equipment.
- DO - Store End Panels horizontally.
- DO - Undercut the ground beneath the End Panel if it binds during installation.
- DO - Extract an End Panel that is 2no Panels deep in stages.

- DON'T - Move the End Panel if any personnel are inside the excavation.
- DON'T - Use lifting lugs for other than loading / unloading, installation or assembly purposes.
- DON'T - Use panel combinations other than those recommended by Generation UK.
- DON'T - Use unsafe lifting equipment.
- DON'T - Leave End Panels in the ground for prolonged periods.
- DON'T - Hammer the End Panels with an excavator bucket during installation.
- DON'T - Push the End Panel with the excavators quick hitch.
- DON'T - Install an End Panel arrangement that is more than 2no Panels deep.
- DON'T - Fully extract an End Panel arrangement that is 2no Panels deep.
- DON'T - Install an End Panel arrangement that exceeds a height of 4688mm.
- DON'T - Continue to push an End Panel that has slipped or become unstable during installation.

IF IN DOUBT CONSULT ALTRAD GENERATION.

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IRL: **00353 1 601 1500**



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