ALTRAD GENERATION
HIRE & SALE

GROUNDWORKS

PRODUCT GUIDE

IRELAND

2025/26

Altrad Generation Hire & Sale

Support for Construction & Industry

Altrad Generation is Ireland's leading supplier of: Scaffolding, Temporary Fencing, Light Access, Edge Protection, Safety Decking, Formwork, Falsework, and Groundworks for hire and sale.

OUR **CUSTOMER COMMITMENT** IS TO DELIVER:

BEST **QUALITY**

We work closely with our suppliers to ensure consistent product quality every time. All our products are specified to meet or exceed statutory requirements, verified by our Quality Assurance team.

BEST **AVAILABILITY**

Our nationwide branch network, transport fleet and stock holding ensure we can supply your equipment needs. What, When and Where you need equipment.

BEST **PARTNERSHIP**

We can take care of all your equipment needs; supplemented by a full range of engineering, design, specification and business services. Our focus is to work together, supporting the growth of your business.

BEST **VALUE**

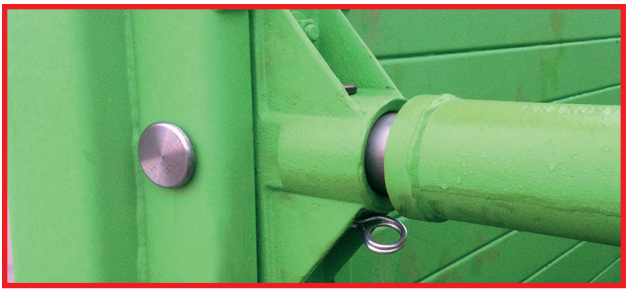
Our global supply chain, purchasing and lean business means we don't pass on unnecessary costs to you. We aim to provide consistently low prices and the best value when you buy or hire from us.

Contents

Groundworks

Trench Boxes

Altrad Generation Trench Boxes are simple to assemble, two-sided excavation support systems designed to be installed by an excavator utilising the 'dig and push' or 'excavate and lower' techniques. Trench Boxes are often used where rapid installation of utility pipelines and trench runs are required. Trench Boxes provide a safe working environment for those on site by safely withstanding the surrounding soil pressure. Trench Boxes can be used in conjunction with four-sided Manhole Boxes to provide complete protection for personnel. Drag Boxes offer a speedy alternative to a Trench Box when laying long pipe runs. If the Permissible SWL is exceeded, **ALWAYS** enquire about our design service. Manhole Braces and Alloy Waller's can be used as alternatives.



Backhoe Trench Box

	Base Unit	Top Unit
Length (mm)	3000	3000
Height (mm)	2000	960
Min Width External (mm)	690	690
Max Width External (mm)	2690	2690
Min Width Internal (mm)	570	570
Max Width Internal (mm)	2570	2570
Thickness (mm)	60	60
Max Clearance Between Struts (mm)	2690	2690
Max Clearance Under Lower Strut (mm)	980	-
Permissible SWL (kN/m^2)	19.40	19.40
Weight (kg)	822	441
Max Depth (mm)	2960	-

The Backhoe Trench Box is a lightweight Trench Box designed for inner city shoring jobs. Used to support sides of excavations, generally used for the laying of small diameter utility pipes such as gas, water, telecoms or power cables. Designed for use with smaller machines such as 180' excavators and rubber tyred excavators. Lightweight alternative to Standard & Mini Trench Boxes when lifting capacity is an issue on site. Effective down to 3.00m, provided ground pressure does not exceed the Permissible SWL of 19.40 kN/m2 for this Box.

Trench Boxes

Backhoe Trench Box

The Backhoe Trench Box is a robust piece of equipment, which acts as a safety shield to provide a safe working area below ground level. For use when working on excavations and pipe laying operations. The Backhoe Trench Box can sustain working earth pressures of up to 20kN/m^2, users should check that the excavation will not impose greater pressures than this.

Installation is easy through the 'Dig and Push' method. This ensures that the side walls of the excavation are supported, and minimises the likelihood of an accident. The panels are 3000mm long by 2000mm deep with a width range of 720mm to 1720mm which can be altered using telescopic struts these are secured in place using the 'Pin and Clip' system, which connects all components. Backhoe Box tops can be used to obtain 3000mm in depth.

- Provides safe working area below ground
- SWL of 20kN/m^2
- Easily Assembled
- Dig and Push method
- 3000m long x 2000m base panels
- Width range of 720mm to 1720mm
- Extension tops are 3000mm x 1000mm
- Maximum working depth 3000mm
- Pin and 'R' Clip method
- Base unit weight of 730kg
- 1200mm clearance below lower strut
- Additional Equipment available

Struts	Internal (mm)
Size 1	600 - 800
Size 2	800-1000
Size 3	1000-1200
Size 4	1200-1400
Size 5	1400-1600

Backhoe Trench Box	Base	Top
Panel Length (mm)	3000	3000
Panel Height (mm)	2000	1000
Panel Thickness (mm)	60	60
Overall External Trench Width (mm)	720 - 1720	720 - 1720
Weight (kg)	730	420
Distance Between Struts (mm)	2670	2670
Clearance Below Strut	1200	-
Standard Working Load	20kN/m^2	20kN/m^2

Trench Boxes

BV60 Trench Box

	Base Unit	Top Unit
Length (mm)	3000	3000
Height (mm)	2000	1000
Min Width External (mm)	820	820
Max Width External (mm)	3820	3820
Min Width Internal (mm)	700	700
Max Width Internal (mm)	3700	3700
Thickness (mm)	60	60
Max Clearance Between Struts (mm)	2600	2600
Max Clearance Under Lower Strut (mm)	950	-
Permissible SWL (kN/m²)	23.50	23.50
Weight (kg)	1154	638
Max Depth (mm)	4000	-

Two-sided mechanical excavation support BV60 Trench Boxes, ideal for the installation of utility pipes and services when ground movement is non-critical. This simple and easy to assemble system has adjustable struts that allow quick width adjustments in trench sizes up to 4m deep and 3.820m wide. Designed to be installed by an excavator using either the dig and push or excavate and lower in place technique, bottom cutting edge for ease of installation, Top panels available to increase excavation depth & compatible with End Panels.

Trench Boxes

Mini Trench Box

The Mini Trench Box can be used in trenches up to 4000mm deep with widths from 610mm to 3200mm, which can be altered using telescopic struts. Up to two extension Boxes can be added on top of the mini Trench Box to achieve additional depth.

- Support Below Ground
- Quick & Easy To Install
- Extension Boxes Available To Increase Depth
- Used In Trenches Up To
- 4000mm Deep
- Dig & Push Method Used
- Pin & Clip System
- Additional Equipment Available

Struts	Internal (mm)
Size 0	600 - 800
Size 1	800 - 1200
Size 2	1200 - 1600
Size 3	1600 - 2000
Size 4	2000 - 2400

Mini Trench Box	Base	Top
Panel Length (mm)	3000	3000
Panel Height (mm)	2000	1000
Panel Thickness (mm)	60	60
Overall External Trench Width (mm)	610 - 3200	610 - 3200
Weight (kg)	1232	676
Distance Between Struts (mm)	2720	2720
Clearance Below Strut	1100	-
Standard Working Load	20kN/m^2	20kN/m^2

Trench Boxes

BV100 Trench Box

	Base Unit	Top Unit	Base Unit	Top Unit
Length (mm)	3500	3500	5000	5000
Height (mm)	2360	1300	2360	1570
Min Width External (mm)	900	900	1500	1500
Max Width External (mm)	3900	3900	4000	4000
Min Width Internal (mm)	700	700	1290	1290
Max Width Internal (mm)	3700	3700	3790	3790
Thickness (mm)	100	100	120	120
Max Clearance Between Struts (mm)	3114	3114	4610	4610
Max Clearance Under Lower Strut (mm)	1540	-	-	-
Permissible SWL (kN/m²)	39.70	39.70	34.30	34.30
Weight (kg)	2094	1368	3180	2170
Max Depth (mm)	6260	-	-	-

With its easy 'pin and clip' adjustment, the BV100 Trench Box is the most advanced and effective Box currently being used within the industry. Our BV100 Trench Box being one of the strongest on the market is able to withstand ground pressure of 39.70 kN/m2 and is robust enough to withstand the rigours of everyday site work. Effective down to 6.50m, provided ground pressure does not exceed the Permissible SWL of 39.70 KN/m2 of this Box.

Magnum Trench Box

	Base Unit	Top Unit
Length (mm)	3400	3400
Height (mm)	4000	1970
Min Width External (mm)	960	960
Max Width External (mm)	4150	4150
Min Width Internal (mm)	760	960
Max Width Internal (mm)	3950	3950
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	2950	2950
Max Clearance Under Lower Strut (mm)	2460	-
Permissible SWL (kN/m²)	36.41	36.41
Weight (kg)	3136	2450
Max Depth (mm)	6640	-

The Magnum Trench Box is the largest in the range of Altrad Generation Trench Boxes. It is designed for deep pipe laying activities. The design is similar to Std & BV100 Trench Boxes but it can achieve greater clearance under struts to allow larger diameter pipes to be installed. It provides clearance of 2460mm under strut through a panel height of 4000mm. Effective down to 6.60m, provided ground pressure does not exceed the Permissible SWL of 36.41 kN/m² of this Box.

Trench Boxes

Standard Trench Box

The Standard Trench Box is used to provide a safe working area below ground and ensure that the side walls of an excavation are continually supported. Standard Trench Boxes can be used in conjunction with other Boxes, including Manhole Boxes. They are quick and easy to install.

The Standard Trench Box can be used in trenches up to 5600mm deep with widths from 690mm to 4500mm. Up to two extension boxes can be added on top of the standard Trench Box to achieve additional depth if needed.

- Two-sided Support
- Used In Conjunction With Manhole Boxes
- Additional Top Boxes Available
- Quick & Easy To Install
- Dig & Push Method Used
- Additional Equipment Available

Struts	Internal (mm)
Size 0	600 - 800
Size 1	800 - 1200
Size 2	1200 - 1600
Size 3	1600 - 2000
Size 4	2000 - 2400

Standard Trench Box	Base	Top
Panel Length (mm)	3500	3500
Panel Height (mm)	2600	1500
Panel Thickness (mm)	100	100
Overall External Trench Width (mm)	690 - 4500	690 - 4500
Weight (kg)	2100	1130
Distance Between Struts (mm)	3210	3210
Clearance Below Strut	1500	-
Standard Working Load	40kN/m^2	40kN/m^2

Trench Boxes

Super Trench Box

The Super Trench Box is used to provide a safe working area below ground and ensure that the side walls of an excavation are continually supported. Standard Trench Boxes can be used in conjunction with other boxes, including manhole boxes. They are quick and easy to install.

The Standard Trench Box can be used in trenches up to 6.1m deep with widths from 700mm to 3300mm. Up to two extension boxes can be added on top of the Standard Trench Box to achieve additional depth if needed.

Struts	Internal (mm)	External (mm)
Fixed 700	700	900
Fixed 800	800	1000
Fixed 1000	1000	1200
Fixed 1200	1200	1400
Fixed 1500	1500	1700
A1	1000 - 1300	1200 - 1500
A	1200 - 1500	1400 - 1700
B	1500 - 2100	1700 - 2300
C	2100 - 3300	2300 - 3500

- Two-sided support
- Used in conjunction with Manhole Boxes
- Additional top boxes available
- Quick and easy to install
- Dig and Push method used
- Edge Safe systems available
- Ladder Access systems available
- Additional Equipment Available

Super Trench Box	Base	Top
Panel Length (mm)	5.1	5.1
Panel Height (mm)	2.5	1.8
Panel Thickness (mm)	100	100
Minimum trench width(mm)	700	700
Maximum trench width(mm)	3.3	3.3
Maximum clearance between struts	4.62	4.62
Maximum clearance below strut	1.5	N/A
Weight(kg)	3800kg*	2280kg*
Super working load	40kN/m^2	40kN/m^2

*Varies with strut width

Drag Boxes

Drag Boxes are a speedy alternative to Trench Boxes, where speed of production is paramount. The Drag Box is used in stable, self supporting soil conditions, and is lowered into a pre-dug trench. Then, with the aid of an excavator, it is dragged along via the front strut as pipe production moves along the trench. In order to enable this, a Drag Box has a cutting edge on the front of the box rather than at the bottom. Drag Boxes also tend to be used on green or brown field sites, where there are no services or obstructions. Drag Boxes should only be used as a shield not as a support.

Drag Box 3m

	Base Unit	Top Unit
Length (mm)	3000	3000
Height (mm)	2000	1000
Min Width External (mm)	760	760
Max Width External (mm)	2660	2660
Min Width Internal (mm)	600	600
Max Width Internal (mm)	2500	2500
Thickness (mm)	80	80
Max Clearance Between Struts (mm)	2200	2200
Max Clearance Under Lower Strut (mm)	1000	-
Permissible SWL (kN/m²)	-	-
Weight (kg)	2000	1000
Max Depth (mm)	3000	-

Drag Box 4m

	Base Unit	Top Unit
Length (mm)	4000	4000
Height (mm)	2420	1820
Min Width External (mm)	760	760
Max Width External (mm)	2660	2660
Min Width Internal (mm)	600	600
Max Width Internal (mm)	2500	2500
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	3120	3120
Max Clearance Under Lower Strut (mm)	1380	-
Permissible SWL (kN/m²)	-	-
Weight (kg)	2510	1970
Max Depth (mm)	4240	-

Drag Boxes

Drag Box 5m

	Base Unit	Top Unit
Length (mm)	5000	5000
Height (mm)	2500	1800
Min Width External (mm)	800	800
Max Width External (mm)	2700	2700
Min Width Internal (mm)	600	600
Max Width Internal (mm)	2500	2500
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	4200	4200
Max Clearance Under Lower Strut (mm)	1470	-
Permissible SWL (kN/m²)	-	-
Weight (kg)	3050	2100
Max Depth (mm)	4300	-

Drag Box 7m

	Base Unit	Top Unit
Length (mm)	7000	7000
Height (mm)	2420	1820
Min Width External (mm)	800	800
Max Width External (mm)	2700	2700
Min Width Internal (mm)	600	600
Max Width Internal (mm)	2500	2500
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	6120	6120
Max Clearance Under Lower Strut (mm)	1380	1380
Permissible SWL (kN/m²)	-	-
Weight (kg)	4620	3570
Max Depth (mm)	4240	-

Drag Boxes

Drag Box

The Drag Box acts as a shield to protect users in self-supporting soil. It is designed to withstand up to 25kN/m^2. Installation requires the 'Excavate and Drag' technique the Box is placed in a pre-dug trench and moved after each instalment of pipe.

- Lifting points for safe slinging
- For use in self-supporting soil
- Standard Drag Box 4 Struts
- Edge Safe Systems Available
- Ladder Access System Available
- Can be used in conjunction with Manhole Boxes

Struts	Internal (mm)	External (mm)
Fixed 700	700	900
Fixed 800	800	1000
Fixed 1000	1000	1200
Fixed 1200	1200	1400
Fixed 1500	1500	1700
A1	1000 - 1300	1200 - 1500
A	1200 - 1500	1400 - 1700
B	1500 - 2100	1700 - 2300
C	2100 - 3300	2300 - 3500

Standard Drag Box	5.0m x 1.8m	5.0 x 2.5m	7.0m x 2.0m
Panel Length (mm)	5000	5000	7000
Panel Height (mm)	1800	2500	2000
Panel Thickness (mm)	100	100	100
Minimum External Trench Width (mm)	700	700	700
Maximum Internal trench width (mm)	3300	3300	3300
Clearance Between Struts (mm)	4520	4520	6580
Max Clearance Below Bottom Strut	1072	1500	1500
Maximum Weight (kg)	2370	3020	4550
Standard Working Load	25kN/m^2	25kN/m^2	25kN/m^2

Drag Boxes

Maxi Drag Box

The Maxi Drag Box is ideal for use with long pipe runs, the size increases productivity allowing for a faster installation time. The Maxi Drag Box can be installed using the 'Excavate and Drag' technique. The Box is placed in a pre-dug trench and pulled along the trench as each section of pipe laying is completed.

- For use in self-supporting soil
- Lightweight
- From 2400kg in weight
- Edge protection systems available
- Ladder access systems available
- Can be used in conjunction with Manhole Boxes

Struts	Size (mm)	Internal (mm)
Size A	508	550 - 750
Size B	838	800 - 1150
Size C	1190	1150 - 1500
Size D	1540	1500 - 1850
Size E	1890	1850 - 2000

Maxi Drag Box	4.0m x 2.0m	4.0m x 1.0m	5.0m x 2.0m	5.0 x 1.0m
Panel Length (mm)	4000	4000	5000	5000
Panel Height (mm)	2000	1000	2000	1000
Panel Thickness (mm)	100	100	100	100
Minimum External Trench Width (mm)	750	750	750	750
Maximum Internal Trench width (mm)	2000	2000	2000	2000
Maximum Clearance Between Struts (mm)	3870	3870	4830	4830
Max Clearance Below Bottom Strut (mm)	1200	-	1200	-
Weight (kg)	1960	1060	2400	1290
Standard Working Load	20kN/m^2	20kN/m^2	20kN/m^2	20kN/m^2

Backhoe Manhole Boxes

Backhoe Manhole Boxes are lightweight boxes, complete with integral end return panels providing additional support making them ideal for installing pre-cast manhole rings. Suitable for excavation depths up to 2.96m Simple pinned strut arrangement. A range of strut lengths is available for non-square configurations. End closure panels available to support the open ends of the box. Trench Guard Edge Protection Panels available & Four way handling point to aid safe assembly.

2m Backhoe Manhole Box

	Base Unit	Top Unit
Length (mm)	2000	2000
Height (mm)	2000	960
Min Width External (mm)	1690	1690
Max Width External (mm)	3690	3690
Min Width Internal (mm)	1570	1570
Max Width Internal (mm)	3570	3570
Thickness (mm)	60	60
Max Clearance Between Struts (mm)	1600	1600
Max Clearance Under Lower Strut (mm)	980	-
Permissible SWL (kN/m²)	38.00	38.00
Weight (kg)	1186	711
Max Depth (mm)	2960	-

2.5m Backhoe Manhole Box

	Base Unit	Top Unit
Length (mm)	2500	2500
Height (mm)	2000	960
Min Width External (mm)	1690	1690
Max Width External (mm)	3690	3690
Min Width Internal (mm)	1570	1570
Max Width Internal (mm)	3570	3570
Thickness (mm)	60	60
Max Clearance Between Struts (mm)	2100	2100
Max Clearance Under Lower Strut (mm)	980	-
Permissible SWL (kN/m²)	30.40	30.40
Weight (kg)	1326	769
Max Depth (mm)	2960	-

Backhoe Manhole Boxes

3m Backhoe Manhole Box

	Base Unit	Top Unit
Length (mm)	3000	3000
Height (mm)	2000	1000
Min Width External (mm)	1690	1690
Max Width External (mm)	3690	3690
Min Width Internal (mm)	1570	1570
Max Width Internal (mm)	3570	3570
Thickness (mm)	60	60
Max Clearance Between Struts (mm)	2630	2630
Max Clearance Under Lower Strut (mm)	980	-
Permissible SWL (kN/m²)	32	32
Weight (kg)	1190	680
Max Depth (mm)	3000	-

Backhoe Manhole Boxes

Backhoe Manhole Box

The Backhoe Manhole Box is a four-sided excavation box which provides a safe working area below ground. The Backhoe Manhole Box can sustain earth pressures of 20kN/m^2. Users should check that the excavation will impose no greater pressures than this.

Installation is easy through the 'Dig and Push' method. This ensures that the side walls of the excavation are supported and minimises the likelihood of an accident. Three panel lengths are available 2000mm, 2500mm or 3000mm. A Top Box can be used to increase depth to a maximum of 3000mm.

- Provides safe working area below ground
- Easily Assembled
- Dig and Push method
- Pin and Clip System
- SWL 20kN/m^2
- Base unit weight 808kg and 975kg
- 2000mm, 2500mm or 3000mm panel lengths
- 1200mm clearance between lower strut
- Panel Thickness 60mm
- Closing panels available
- Additional equipment available

Backhoe Manhole Box	2m		2.5m		3m	
	Base	Top	Base	Top	Base	Top
Panel Length (mm)	2000	2000	2500	2500	3000	3000
Panel Height (mm)	-	-	-	1000	2000	1000
Panel Thickness (mm)	60	60	60	60	60	60
Weight (kg)	808	507	875	460	975	508
Distance Between Struts (mm)	1840	1840	2340	2340	2840	2840
Clearance Below Strut (mm)	1200	-	1200	-	1200	-
To Suit Ring Size (mm)	1050/1200		1050 / 1200 / 1350		1350 / 1500 / 1800	
Standard Working Load	20kN/m^2	20kN/m^2	20kN/m^2	20kN/m^2	20kN/m^2	20kN/m^2

BV100 Manhole Boxes

A four-sided mechanical excavation support Manhole Box, ideal for installing pre-cast concrete manholes and small chambers or tanks where ground movement is non-critical. Can be used to form part of a continuous trench system in excavations up to 5.3m deep and 4.7m wide.

- Designed to be installed by excavator using either the dig and push or excavate and place technique
- Bottom cutting edge for ease of installation
- Top panels available to increase excavation depth

If you are unsure about the depth or SWL, we recommend that you speak to us about our design service. Call all our excavation safety experts on 0800 779 7113 or email groundworks.enquiries@altradgeneration.com to discuss your project requirements.

Manhole Braces are a good alternative if SWL are expected to be exceeded and/or if cross services are an issue on-site.

ALWAYS enquire about design service if unsure.

Manhole Boxes are similar to Trench Boxes in their basic function, however they incorporate integral end return panels thus providing additional ground support, making them ideal for installing pre-cast manhole rings in trench runs as an alternative to using sheets and frames. There are six sizes of Manhole Box available to cater for common sizes of pre-cast manhole rings. Each box can be assembled and installed quickly and without the need for an operative to enter the unsupported excavation. Manhole Boxes can be used in most ground conditions to support trenches with depths of up to 5.3m by utilising the base module with two box tops and a variety of different strut types. Trench Guard Edge Protection system is available for this product. Four-way handling points to aid safe assembly.

BV100 Manhole Boxes

BV100 Manhole Box 2.5m

	Base Unit	Top Unit
Length (mm)	2500	2500
Height (mm)	2360	1470
Min Width External (mm)	1900	1900
Max Width External (mm)	4900	4900
Min Width Internal (mm)	1700	1700
Max Width Internal (mm)	4700	4700
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	2080	2080
Max Clearance Under Lower Strut (mm)	1540	-
Permissible SWL (kN/m²)	55-70	55-70
Weight (kg)	2026	1449
Max Depth (mm)	5300	-

BV100 Manhole Box 3.0m

Length (mm)	3000	3000
Height (mm)	2360	1470
Min Width External (mm)	1900	1900
Max Width External (mm)	4900	4900
Min Width Internal (mm)	1700	1700
Max Width Internal (mm)	4700	4700
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	2580	2580
Max Clearance Under Lower Strut (mm)	1540	-
Permissible SWL (kN/m²)	46-40	46-40
Weight (kg)	2226	1589
Max Depth (mm)	5300	-

BV100 Manhole Box 3.5m

Length (mm)	3500	3500
Height (mm)	2360	1470
Min Width External (mm)	1900	1900
Max Width External (mm)	4900	4900
Min Width Internal (mm)	1700	1700
Max Width Internal (mm)	4700	4700
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	3050	3080
Max Clearance Under Lower Strut (mm)	1540	-
Permissible SWL (kN/m²)	39-70	39-70
Weight (kg)	2426	1729
Max Depth (mm)	5300	-

BV100 Manhole Boxes

BV100 Manhole Box 4.0m

	Base Unit	Top Unit
Length (mm)	4000	4000
Height (mm)	2360	1470
Min Width External (mm)	1900	1900
Max Width External (mm)	4900	4900
Min Width Internal (mm)	1700	1700
Max Width Internal (mm)	4700	4700
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	4080	4080
Max Clearance Under Lower Strut (mm)	1540	-
Permissible SWL (kN/m²)	31-85	31-85
Weight (kg)	2616	1869
Max Depth (mm)	5300	-

BV100 Manhole Box 4.5m

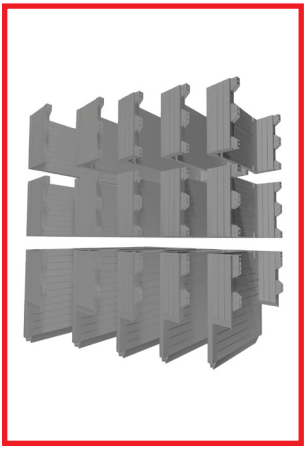
Length (mm)	4500	4500
Height (mm)	2360	1470
Min Width External (mm)	1900	1900
Max Width External (mm)	4900	4900
Min Width Internal (mm)	1700	1700
Max Width Internal (mm)	4700	4700
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	3580	3580
Max Clearance Under Lower Strut (mm)	1540	-
Permissible SWL (kN/m²)	30-60	30-60
Weight (kg)	3326	2329
Max Depth (mm)	5300	-

BV100 Manhole Box 5.0m

Length (mm)	5000	5000
Height (mm)	2360	1470
Min Width External (mm)	1900	1900
Max Width External (mm)	4900	4900
Min Width Internal (mm)	1700	1700
Max Width Internal (mm)	4700	4700
Thickness (mm)	100	100
Max Clearance Between Struts (mm)	4580	4580
Max Clearance Under Lower Strut (mm)	1540	-
Permissible SWL (kN/m²)	24-50	24-50
Weight (kg)	3576	2509
Max Depth (mm)	5300	-

Manhole Boxes

Manhole Box



The Manhole Box is a four-sided excavation protection system, which is used whilst installing pre-cast manholes, chambers or tanks. The Manhole Box can be used in conjunction with trench boxes.

The Manhole Box is quick and easy to install and can be used in trenches up to 5500mm deep. Four different sized panels are available to suit a wide range of needs, these sizes also suit all pre-cast manhole rings. Two additional Top Boxes can be used with the Manhole Base Box to increase the depth to 5500mm.

- Four Sided
- Dig & Push Method Used
- Additional Extension Boxes
- Used In Excavations Up To 5500m In Depth
- Four Different Sizes Available
- Closing Panels Available
- Edge Safe Systems Available
- Ladder Access System Available

Manhole Box	2.5mm		3.0m		3.5mm		4.0m		4.7m	
	Base	Top	Base	Top	Base	Top	Base	Top	Base	Top
Panel Length (mm)	2500	2500	3000	3000	3500	3500	4000	4000	4700	4700
Panel Height (mm)	2500	1500	2500	1500	2500	1500	2500	1500	2500	1500
Panel Thickness (mm)	100	100	100	100	100	100	100	100	100	100
Weight (kg)	2402	1374	2608	1670	2800	1800	3570	2370	4850	2910
Distance Between Struts (mm)	2220	2220	2720	2720	3220	3220	3780	3780	4490	4490
Strut Height Clearance (mm)	1500	-	1500	-	1500	-	1500	-	1500	-
To Suit Ring Size (mm)	1050/1200/1350		1350/1500/1800		1800/2100		2100/2400/2700		3000	
Standard Working Load	40kN/m^2		40kN/m^2		40kN/m^2		40kN/m^2		35kN/m^2	

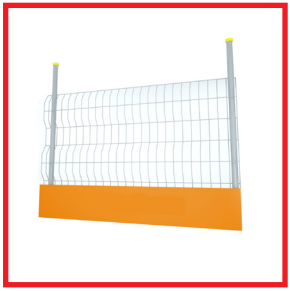
Trench Box Safety Ancillaries

End Panels

End panels are used in conjunction with Altrad Generation Trench, Manhole and Drag Boxes to safely seal off the open ends of an excavation and provide a completely enclosed working environment.

Code	Product/Dimensions	SWL (Kn/M²)	Weight
084793	2500mm x 2500mm	36.4	650kg
084794	1800mm x 1200mm	36.4	179kg
084795	2400mm x 1200mm	36.4	242kg
084796	2400mm x 1800mm	36.4	329kg
084797	3000mm x 2000mm	36.4	452kg
084802	End Panel Connector	-	-
084803	End Panel Connector Pin	-	-

Trench Guard Edge Protection



Trench Guard Edge Protection has been designed to protect work personnel from open excavations and falling debris. Trenchguard conforms to the latest temporary Edge Protection legislation BS EN 13374:2013 and is certified for Fall Protection Worldwide. Trenchguard has a built-in toe board to prevent debris from falling onto operatives working below. Fits all types of excavation equipment. Lightweight for ease of use by site operatives and quick installation when used in conjunction with post and clamps.

Code	Product	SWL (Kn/M²)	Weight
084909	Trench Guard Panel	2245mm x 1150mm	15.00kg
084910	Trench Guard Panel	2700mm x 1150mm	18.00kg
084911	Trench Guard Panel	1800mm x 1150mm	12.00kg
084912	Corner Panel	775mm x 775mm	10.00kg
084914	Telescopic Box Clamp	-	5.00kg
084913	Telescopic Sheet Clamp	-	4.00kg

Trench Box Safety Ancillaries

Ladder Safe

Manufactured from mild steel with a powder coated finish. Specially designed for use on all types of Box and sheeted excavations. Cantilevered platform enables safe side-entry onto ladder. Standard pole ladder fits directly onto the unit and is locked in place with two ladder clamps. Adjustable clamps fit directly onto a Trench Box or sheets (two sheet clamps and two box clamps supplied with platform). Adjustable front legs for ease of levelling. Collapsible sides and gate for ease of storage.

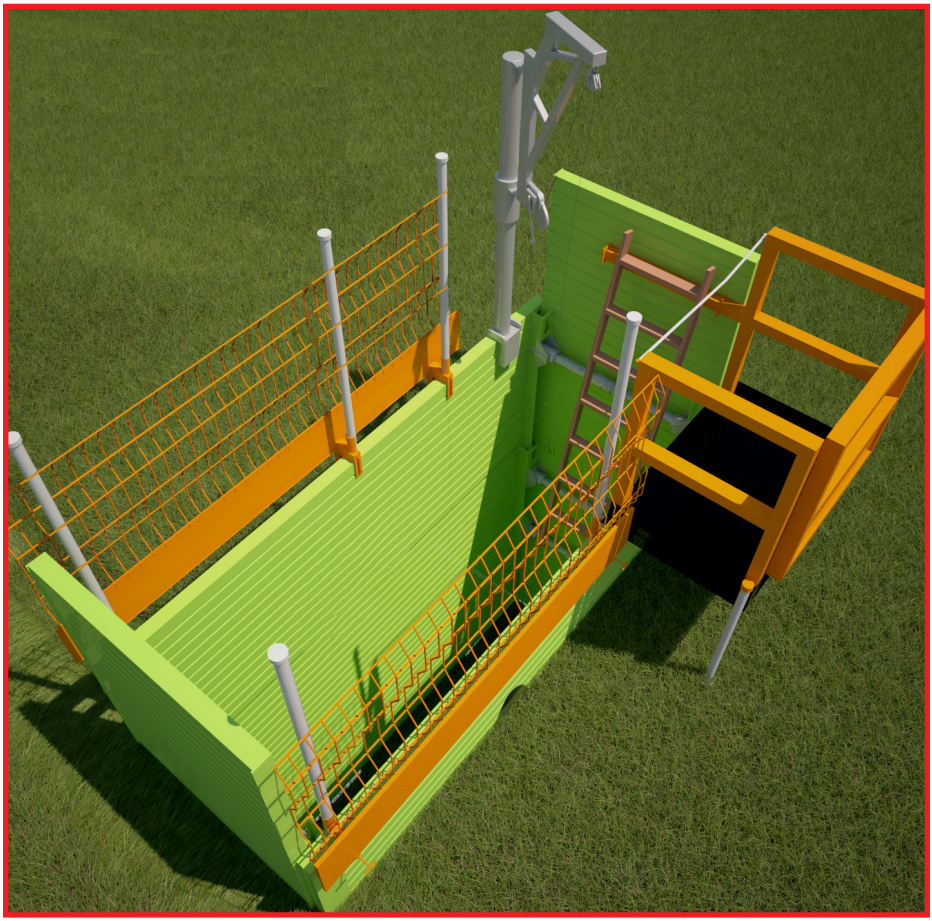
Code	Product	SWL (kN/m²)	Weight
084917	Mini Ladder Safe Platform	72	650.00kg
084918	Collapsible Ladder Safe Platform	98	179.00kg

Trench Box Safety Ancillaries

Davit Arm

Altrad Generation Davit Arms' unique four piece construction allows single operative installation and ease of use on site. Allowing its manual rescue winch to easily lift upto 140kg from all types of Box and sheeted excavations.

Code	Product	SWL (kN/m²)	Weight
089408	Davit Arm	140	75.00kg



Alloy Waler Rails

Alloy Waler Rails are used as an alternative to Trench Boxes where cross services are an issue. They are mainly used in city center and highway excavations where ground movement must be kept to a minimum. They offer a two-sided hydraulic support system used in conjunction with Altrad Generation Trench Sheets to allow a clear working area for the inspection/laying of utilities.

Waler Cylinder	Min Length	Max Length	Swl (Kn)	Weight
Type A	505mm	805mm	80	12.00kg
Type B	705mm	1205mm	80	15.00kg
Type C	1105mm	1605mm	80	22.00kg
Type D	1505mm	2005mm	80	28.00kg
1m Waler Cylinder Extensions to achieve 3m width			80	18.00kg

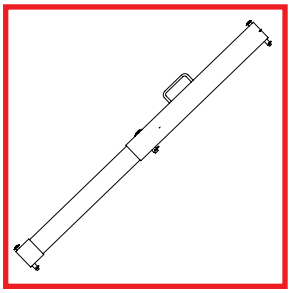
Rail Size	Width	Swl (Kn/M)	Cylinders Required	Weight
2000mm	100mm	22.91	2	22.00kg
2500mm	100mm	22.91	2	27.50kg
3000mm	100mm	22.91	2	33.00kg
4000mm	100mm	22.91	2	44.00kg
5000mm	100mm	22.91	3	55.00kg

Waler Cylinder	Min Length	Max Length	Swl (Kn)	Weight
Type A	530mm	820mm	80	10.00kg
Type B	780mm	1310mm	80	16.00kg
Type C	1260mm	2010mm	80	23.00kg
1m Waler Cylinder Extensions to achieve 2.75m width			80	18.00kg

Rail Size	Width	SWL (kN/m)	Cylinders Required	Weight
2000mm	180mm	58	2	21.00kg
2500mm	180mm	24	2	26.00kg
3000mm	180mm	16	2	31.00kg
4000mm	180mm	8.2	2	41.00kg
5000mm	180mm	4.9	3	52.00kg

Alloy Waler Rails

Waler End Bearers



Our Aluminium Waler End Bearer system has been developed to be used with a wide range of Aluminium Waler Rails to provide lightweight support to non-battered ends of trenches. To be used in conjunction with Trench Sheets/existing Waler systems, this product offers a safe and efficient replacement to less suitable methods, such as timber or road plates, by retaining backfill, preventing accidental dislodgement of loose material and also a barrier to prevent unauthorised access to the excavation.

Min Length	Max Length	Weight
530mm	820mm	13.50kg
780mm	1310mm	20.00kg
1260mm	2010mm	30.00kg

GeoBrace

GeoBrace is used with trench sheets or sheet piles to support small to large excavations and for the construction of manholes, chambers, tank installations and basements.

Versatile

- GeoBrace is available in 3 sizes – 254, 390 and 550 allowing for different lengths to be achieved.

Enhanced Performance

- There is no loss of allowable bending moment at the joints between extensions and the hydraulic ram unit minimising the deflection on the beam.

Innovative Design

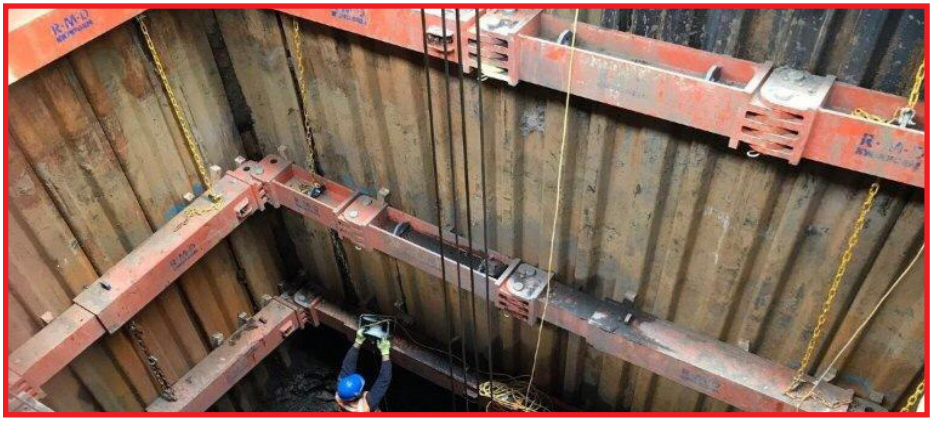
- Thanks to GeoBrace's unique and innovative design, it has the slimmest section on the market at the joints. This means the width of the excavation can be minimised.

Compatible

- All 3 lengths of GeoBrace are interchangeable even allowing connection to our smaller Double Acting Manhole Brace range with the use of an adapter enabling different sizes of brace to meet at the corners of rectangular excavations.

European Standard Compliance

- The GeoBrace is fully European Standard compliant, designed and manufactured in accordance with latest standards EN14653, EN1090 and carry the quality CE mark.



Applications

GeoBrace frames are extremely quick to install and remove and can be used in practically any shape of excavation.

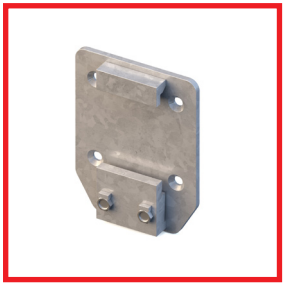
- Trenches
- Manholes
- Cofferdams
- Chambers
- Basements
- Tanks

GeoBrace 254 Extensions

Code	Description	Size	Weight
GB5405	254 Extension	500mm	209kg
GB5410	254 Extension	1000mm	262kg
GB5415	254 Extension	1500mm	322kg
GB5420	254 Extension	2000mm	376kg
GB5430	254 Extension	3000mm	489kg
GB5440	254 Extension	4000mm	602kg
GB5460	254 Extension	6000mm	829kg

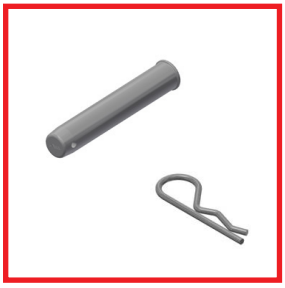
GeoBrace 254 Ram Unit

Code	Description	Size	Weight
GB5400	254 Ram Unit - 400kN	-	798kg



GeoBrace 254 Megashor Connector

Code	Description	Size	Weight
GB5403	254 Megashor Connector	-	20.40kg



GeoBrace 254 Pin & R-Clip

Code	Description	Size	Weight
GB5401	254 Pin	59mm x 335mm	7.10kg
GB5401	254 R-Clip	8mm	0.14kg

GeoBrace 254 Inclined Prop Connector

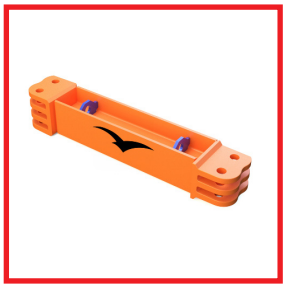
Code	Description	Size	Weight
GB5404	Inclined Prop Connector	490 x 300 mm	37.8kg

GeoBrace 254 DAMB Adapter 1

Code	Description	Size	Weight
GB5491	DAMB Adabapter 1	-	30kg

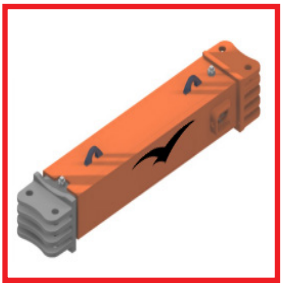
GeoBrace 254 DAMB Adapter 2

Code	Description	Size	Weight
GB5492	DAMB Adabapter 2	-	36.1kg



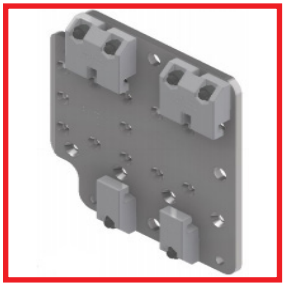
GeoBrace 390 Extensions

Code	Description	Size	Weight
GB3909	390 Extension	900mm	473kg
GB3913	390 Extension	1350mm	574kg
GB3927	390 Extension	2700mm	893kg
GB3954	390 Extension	5400mm	1514kg
GB3918	390 Extension	10800mm	2774kg



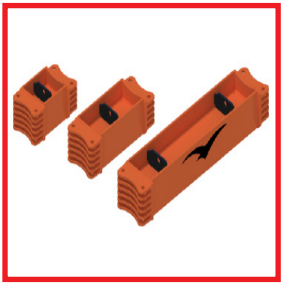
GeoBrace 390 Ram Unit

Code	Description	Size	Weight
GB3900	390 Ram Unit - 720kN	-	1479kg



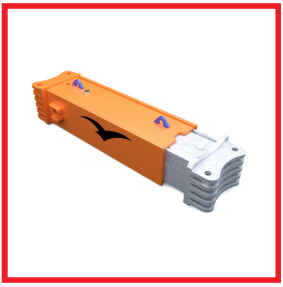
GeoBrace 390 Straight Prop Connector

Code	Description	Size	Weight
GB3904	390 Straight Prop Connector	600mm x 640 mm	76.9kg



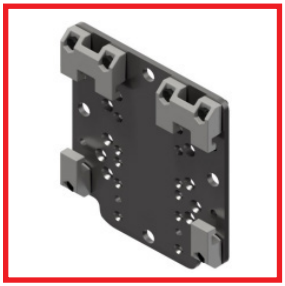
GeoBrace 550 Extensions

Code	Description	Size	Weight
GB5009	550 Extension	900mm	782kg
GB5013	550 Extension	1350mm	938kg
GB5027	550 Extension	2700mm	1446kg
GB5054	550 Extension	5400mm	2422kg
GB5108	550 Extension	10800mm	4415kg



GeoBrace 550 Ram Unit

Code	Description	Size	Weight
GB5000	550 Ram Unit - 1250kN	-	2631kg

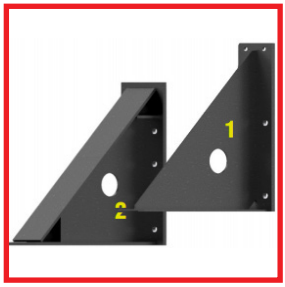


GeoBrace 550 Straight Prop Connector

Code	Description	Size	Weight
GB5003	550 Straight Prop Connector	780mm x 880mm	163kg

GeoBrace 550 Corner Infill Plate

Code	Description	Size	Weight
GB5005	550 Corner Infill Plate	490mm x 375mm	17.4kg



GeoBrace 550 Support/Uplift Brackets

Code	Description	Size	Weight
GB5301	550 Support/Uplift Bracket 1	-	46.5kg
GB5302	550 Support/Uplift Bracket 2	-	74.4kg
GB5303	550 Uplift Bracket 3	-	136kg

Tubeshor

Tubeshor Hybrid Hydraulic Tubular Shoring System can be used for anything from propping Waling Beams in excavation support applications to capping beams of large excavations. Tubeshor is also suitable for use in vertical applications such as bridge bearing replacement. An integral hydraulic ram unit is rated for an AWL of 2500kN rising to 4500kN once the unique mechanical lock off collar is engaged.

Applications

- Basement Propping
- Vertical Propping
- Cofferdams
- Deep Excavations
- Ultra Heavy Duty Horizontal Shoring
- Bridge Bearing Replacement
- Offshore Platform Assembly
- Ship Building

Advantages

Five Diameters

Available in five diameters – 320, 460, 610, 1060 & 1370 which can all be simply bolted together using accessories to create required lengths. This provides flexibility to cope with horizontal propping lengths up to 70m with fewest possible joints.

Enhanced Performance

The inner section of the ram unit extends by up to 800mm and is threaded to enable mechanical lock-off using a robust screwed collar which increases the allowable working load of the ram unit to 4500kN. For higher loads, flat jacks enable working loads up to 16,000kN.

Robust Construction

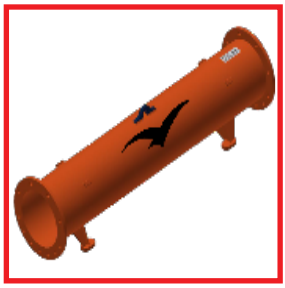
Heavy duty construction using grade S460 steel, designed to reduce weight, minimise thermal loading, and be less prone to damage.

European Standard Compliance

Tubeshor is fully European Standard compliant, designed and manufactured in accordance with latest standards EN14653, EN1090 and carries the dual CE and UKCA marking.

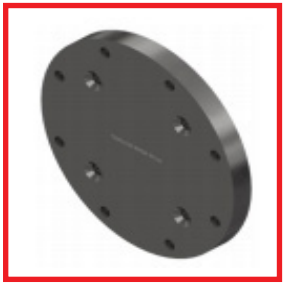
Unrivaled Capability

Unrivalled axial load capacity and market leading high axial stiffness due to its ability to isolate and lock off the hydraulic element of the prop. Tubeshor will accommodate the rigors of ultra heavy duty propping, cofferdams & bridge bearing replacement applications.



Tubeshor 320 Extensions

Code	Description	Size	Weight
TG3009	320 Extension	900mm	84.9kg
TG3018	320 Extension	1800mm	141kg
TG3027	320 Extension	2700mm	198kg



Tubeshor 320 Blanking Plate

Code	Description	Size	Weight
TG3100	320 Blanking Plate	40mm	43.0kg

Tubeshor 320 Prop End

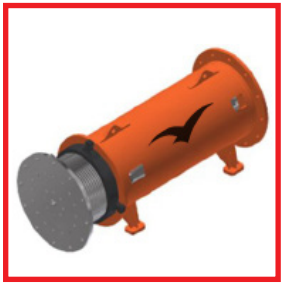
Code	Description	Size	Weight
TG3102	320 Prop End	-	46.7kg

Tubeshor 320 Telescopic Jack

Code	Description	Size	Weight
TG3101	320 Telescopic Jack	-	376.2kg

Tubeshor 460 Extensions

Code	Description	Size	Weight
TG0404	460 Extension	450mm	114kg
TG0436	460 Extension	3600mm	585kg
TG0472	460 Extension	7200mm	1080kg
TG6120	Allow Bow Shackle	1.25"	4.43kg



Tubeshor 460 Ramlock Unit

Code	Description	Size	Weight
TG0421	460 Ramlock Unit	-	1390kg

Tubeshor 460 Spherical Bearer

Code	Description	Size	Weight
TG0420	460 Spherical Bearer	-	146kg

Tubeshor 610 Extensions

Code	Description	Size	Weight
TG6005	610 Extension	500mm	201kg
TG6010	610 Extension	1000mm	324kg
TG6020	610 Extension	2000mm	530kg
TG6030	610 Extension	3000mm	721kg
TG6040	610 Extension	4000mm	910kg
TG6070	610 Extension	7000mm	1480kg

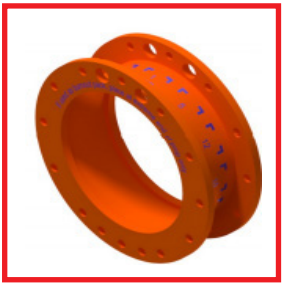
Tubeshor

Tubeshor 610 Ram Lock Unit

Code	Description	Size	Weight
TG6201	610 Ram Lock Unit	1675mm x 2475mm	2420kg

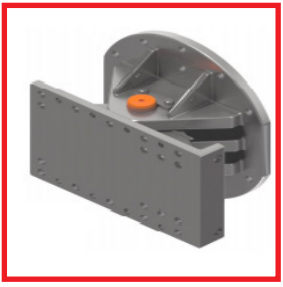
Tubeshor 610 Spherical Bearer

Code	Description	Size	Weight
TG6206	Spherical Bearer	-	358kg



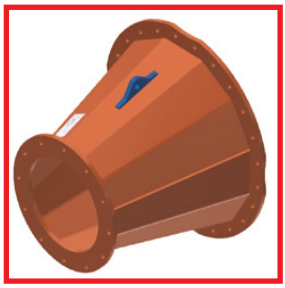
Tubeshor 610 Burnout Pack

Code	Description	Size	Weight
TG6207	Burnout Pack	250mm	148kg



Tubeshor 610 Plain Swivel Unit Assembly

Code	Description	Size	Weight
TG6202	610 Swivel Plate Male	-	243kg
TG6202	610 Swivel Plate Female	-	291kg
TG6202	610 Swivel Unit Plain Pin	-	19.3kg



Tubeshor 1060 - 610 Adapter Cone

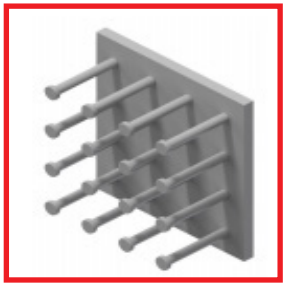
Code	Description	Size	Weight
TG0000	1060-610 Adaptor Cone	1000mm	436kg

Tubeshor 1060 Extensions

Code	Description	Size	Weight
TG0144	1060 Extension	1.44m	801kg
TG0288	1060 Extension	2.88m	1370kg
TG0576	1060 Extension	5.76m	2480kg
TG1152	1060 Extension	11.52m	4700kg

Tubeshor 1060 Precamber Shim Set

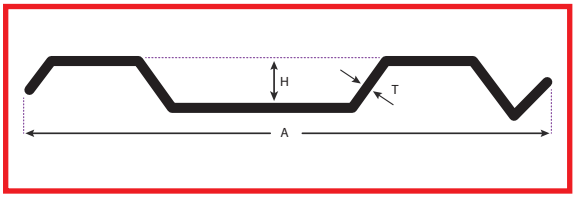
Code	Description	Size	Weight
TG0001	1060 Precamber Shim Set	-	102kg



Tubeshor 610 Cast-in Plate

Code	Description	Size	Weight
TG6318	610 Cast in Plate (32 Studs)	920 x 490 x 30mm	126kg

Trench Sheeting - Available Nationwide



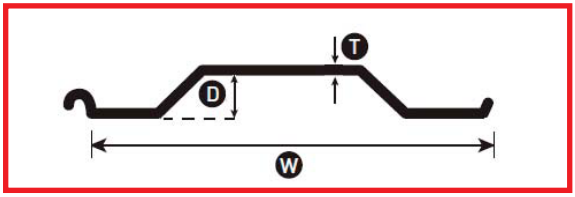
Standard Overlapping

Code - 115

Overlapping profile in mild steel, available in lengths from 2m to 5m.

A (mm)	Effective Width Per Sheet	H (mm)	T (mm)	Kg/m	Kg/m²
350	330	35	3.4	10.86	32.91

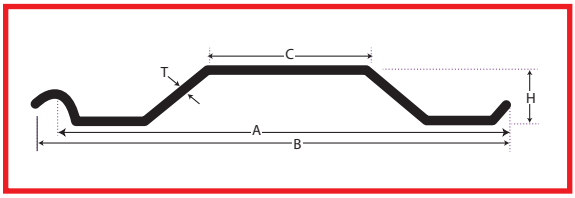
Section Modulus Per Sheet	Section Movement Knm/m	Available Lengths
15.93	7.75	2000mm - 5000mm



KD 4 Sheet Overlapping

Steel Grade	Width (mm)	Depth (mm)
S 275 JR	400	50

Thickness (mm)	Weight (kg/m)	Section Modulous Z (cm³/m²)
6.0	21.90	40.34



BD500 Overlapping

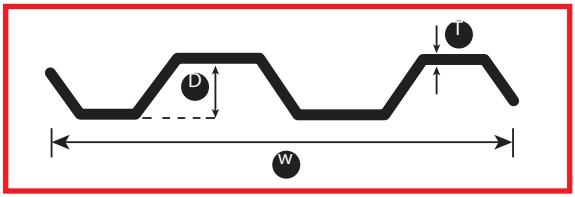
Code - 245

Overlapping profile in high yield steel, available in lengths from 3m to 7m.

A (mm)	B (mm)	C (mm)	H (mm)	T (mm)	kg/m	kg/m²
508	552.9	220	50	6	27.74	54.61

Section Modulus Per Sheet	Section Modulus cm³ Per Metre	Bending Movement Knm/m	Available Lengths
51.25	100	36.41	3000mm - 7000mm

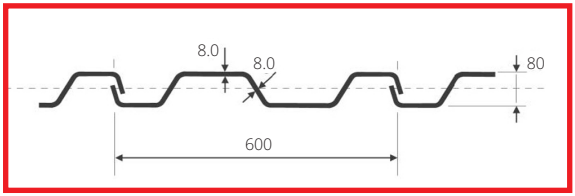
Trench Sheeting - Available Nationwide



KKD 600 Sheet Overlapping

Steel Grade	Width (mm)	Depth (mm)
S 275 JR	600	80

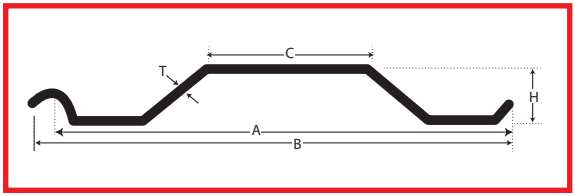
Thickness (mm)	Weight (kg/m)	Section Modulous Z (cm^3/m^2)
6.0	37.40	179.0



KD6-8 Overlapping

Code - 260

Sectional Area (cm^2)	Mass Single Pile (kg/m)	Mass Per m Wall (kg/m^2)	Moment of Inertia (cm^4)	Elastic Section Modules (cm^3)	Radius of Gyration (cm)
64.44	50.00	83.33	968.00	242	3.00



HD2 Overlapping

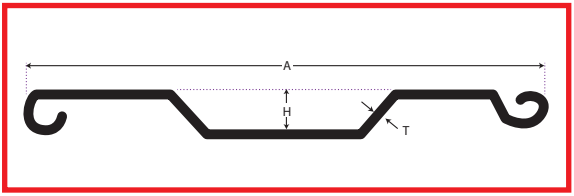
Code - 215

Overlapping profile in high yield steel, available in lengths from 3m to 8m.

A (mm)	B (mm)	C (mm)	H (mm)	T (mm)	kg/m	kg/m^2
742	764	267	90	8	54.17	73.01

Section Modulus Per Sheet	Section Modulus cm^3 Per Metre	Bending Movement Knm/m	Available Lengths
187.91	253.25	59	3000m - 8000m

Trench Sheeting - Available Nationwide



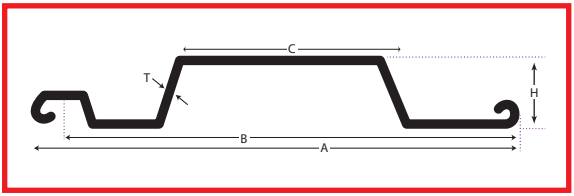
L8 Interlocking

Code - 120 (Sale Only)

Interlocking profile in mild steel, available in lengths from 1m to 5m.

A (mm)	Effective Width Per Sheet (Mm)	H (mm)	T (mm)	Kg/m	Kg/m²
460	432	35	3.4	14.52	33.61

Section Modulus Per Sheet	Bending Movement Knm/m	Available Lengths
22.23	8.22	1000mm - 5000mm



BVI500 Interlocking

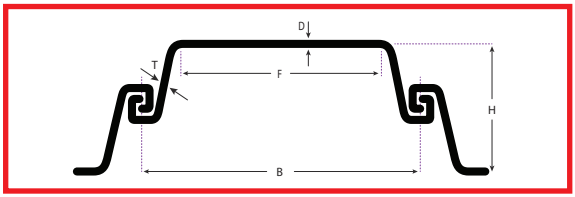
Code - 395

Overlapping profile in high yield steel, available in lengths from 3m to 8m.

A (mm)	B (mm)	C (mm)	H (mm)	T (mm)	kg/m	kg/m²
535.2	494	230.6	75	6	33.53	67.88

Section Modulus Per Sheet	Section Modulus cm³ Per Metre	Bending Movement Knm/m	Available Lengths
43.11	91.863	50.3	3000mm - 8000mm

Trench Sheeting - Available Nationwide



Available Nationwide

Larsen Range Interlocking

Altrad Generation Steel Sheet Piles are used for permanent and temporary works structures. The section of the pile interlocks producing a continuous wall with a succession of closely fitting joints. A range of corner and junction piles are available to suit all requirements.

Section	L601	L602	L603	L604	L605	L606	L607
B (mm)	600	600	600	600	600	600	600
H (mm)	310	310	320	390	420	420	435
D (mm)	7.5	8.2	9	9.5	10	16.5	21.5
T (mm)	6.4	8	9	9.5	10	9.2	9.8
F Flat Of Pan (mm)	253	250	384	382	367	348	380
Sectional Area (cm^2/m)	98.3	115.4	137.6	157.3	174.9	201.3	243
Kg/m	46.3	54.3	66.5	74.2	82.4	94.8	114.4
Kg/m^2	77.2	90.5	110.8	123.5	137.5	158	191
Combined Moment Of Intertia (cm^4/m)	11496	13075	20178	32599	42420	52,631	69600
Section Modulas (cm^3/m)	742	845	1261	1671	2020	2506	3200

Altrad Generation also supplies Piling Hammers, Pipe Lifters. Call all our excavation safety experts on **0800 779 7113** or email **groundworks.enquiries@altradgeneration.com** to discuss your project requirements.

Piling Hammers

Probst Pipe Lifters

Groundwork Ancillaries

Manhole Shutters

Modular Steel Shutters used to form concrete surround around Manhole Rings in situ. Combination of three panel sizes allows great flexibility on site to cover all Manhole Ring sizes ranging from 675mm to 3000mm diameter and available in two heights: 900mm and 1800mm.

Diameter of Manhole (mm)	Thickness (mm)	Number of Sections Required to Form Shutter			External Diameter of Concrete (mm)	Theoretical Thickness of Concrete (mm)	Volume of Concrete Surround (m^3)	
		A	B	C			900	1800
675	65	2	1	0	1171	182	0.51	1.02
900	75	2	2	0	1368	159	0.54	1.09
1050	85	3	0	1	1541	160	0.63	1.25
1200	100	3	1	1	1738	169	0.75	1.50
1350	112	3	2	0	1855	141	0.68	1.36
1350	112	3	2	1	1935	181	0.90	1.80
1500	115	4	0	1	2028	150	0.79	1.58
1500	115	4	0	2	2107	189	1.02	2.05
1800	115	4	2	0	2342	156	0.96	1.93
2100	120	5	1	0	2632	146	1.03	2.05
2100	120	5	1	1	2712	186	1.33	2.66
2400	135	6	0	1	3002	166	1.33	2.66
2700	162	6	2	0	3316	146	1.31	2.62
2700	162	6	2	1	3396	186	1.69	3.38
3000	210	7	1	1	3686	133	1.34	2.68
3000	210	7	2	0	3800	190	1.94	3.89

Height (mm)	Weight Of Sections (Kg)		
	A	B	C
900	27.5	12.5	6
1800	55	25	12

Code	Description
085204	Manhole Shutters - 18A
085205	Manhole Shutters - 18B
085206	Manhole Shutters - 18C
085291	Manhole Shutters - 900A
085292	Manhole Shutters - 900B
085293	Manhole Shutters - 900C

Groundwork Ancillaries

Manhole Safety Platform

Code	To Suit Manhole Ring Dia. (mm)	Weight
085207	1200	211kg
085208	1800	402kg
085209	2400	549kg

Driving Caps

Driving Caps are used with Altrad Generation Trench Sheets to minimise damage to the sheet during driving.

Code	Driving Caps	Weight
140001	Universal	8.00kg
140005	BD	20.00kg
140004	HD	25.00kg

Quick Release Pitching Shackle

Used to install Altrad Generation Trench Sheets, our quick release Pitching Shackle uses a spring loaded pin and release system to grip the Trench Sheet through the Trench Sheet's lifting hole. The Sheet can then be driven into position.

Code	Product	SWL (Tonnes)	Weight
083002	2t Quick Release	2	19.00kg
083003	3t Quick Release	3	23.00kg

Groundwork Ancillaries

Extraction Clamps

Used to extract Altrad Generation Trench Sheets, note that Extraction Clamps should never be used to pitch Trench Sheets.

Code	Product	SWL (Tonnes)	Weight
420007	Extraction Clamp	5	25.00kg
420008	HD Extraction Clamp	7.5	30.00kg

Four Leg, Hanging & Snatch Chains

The Four Leg Lifting Chain is used to safely lift all shoring equipment. Our wide range of lifting chains are all fully LOLER compliant and come supplied with all relevant certificates.

The Hanging Chain is used to hang hydraulic support from Trench Sheets.

The Snatch Chain is used to safely extract all shoring equipment. Snatch Chains are fully LOLER compliant and come supplied with all relevant certificates.

Code	Product	SWL (Tonnes)	Length (m)	Weight
083012	Four Leg Waler Chain	3.15	4	30.00kg
083006	Four Leg Lifting Chain	6.7	4	45.00kg
083007	Four Leg Lifting Chain	6.7	6	65.00kg
083015	Two Leg 13mm Lifting Chain	7.5	7	63.00kg
083011	Heavy Duty Hanging Chain	N/A	2	3.00kg
083013	Snatch Chain	8	1.5	18.00kg

Groundwork Ancillaries

Trench Safety Covers

Our range of Trench Safety Covers are ideal for protecting against falls when working on pavement excavations.

Code	Product	Thickness (mm)	Width (mm)	Length (mm)	Weight	Weight Tested (kg)
TREN81	Safe Cover 16/12	25	1600	1200	33.00kg	Up to 2000
TREN80	Safe Cover 12/8	30	1200	800	12.00kg	Up to 2000
-	Trench-Pro	30	1000	1100	15.00kg	Up to 2000

Elite TrenchCross™

The strongest, lightest and most versatile trench cover that provides the complete site solution.

- Detachable handrails
- East to lift
- Anti-slip
- Reflecting film
- Handles
- Can be fastened to the ground
- Anti-slip caps
- Full plastic frame

Code	Product	Width (mm)	Length (mm)	Weight	Maximum Load (kg)
081872	Elite TrenchCross™	100	170	20.00kg	1000

Ground Protection

Ground Guards

Ground-Guards provides temporary ground protection, traction and access over sand, mud, marshy areas whilst protecting your personnel, equipment, vehicles and turf.

It is a simple and very easy to use system. When locked in place Ground-Guards form temporary roadways and car parks for vehicles and trucks as well as solid surfaces for events, drilling, civil engineering and other industrial applications.

- Lightweight mats are easy to move around using the Handy-Hook and easy to lay by hand
- Quickly connect together using No-Tools joiners
- Life time guarantee against breakage by vehicles up to 120 tonnes (conditions apply)*
- Eliminate cost of continually replacing slippery splintered plywood boards
- Super tough 100% recycled poly-ethylene plastic 1/2" thick – flexible enough to conform to ground contours

Relocatable roadway gives rapid site access

A Ground-Guard trackway is the smart solution for your rapid site access requirements. It protects your ground and turf, minimises reinstatement costs, prevents vehicles getting bogged down, keeps your jobs on schedule, and keeps your workers SAFE!

Why get bogged down without Ground-Guards?

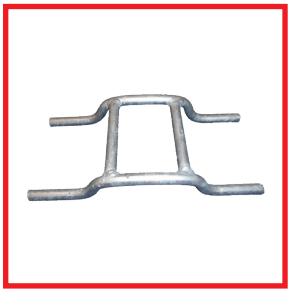
Weighing only 39kg, the panels can be installed by hand without a crane lorry, yet are so tough that they are guaranteed unbreakable by vehicles up to 120 tonnes making them ideal for manoeuvring heavy equipment around on site with minimal disturbance to the turf.

Code	Description	Core Thickness (mm)	Width (mm)	Length (mm)	Weight (kg)
GMAT01	Ground Guards	14	1217	2433	39

Loading Rating	Material	Traction
Unbreakable by vehicles up to 120 tonnes*	100% recycled HDPE. Resistant to acids, alkalis and solvents	Patented ribbed tread pattern provides extra traction and stiffness, without additional weight

*Ground-Guards are guaranteed when used by vehicles up to 120 tonnes. The guarantee does not extend to damage caused by lifting the Ground Guard by mechanical means or damage due to misuse. Note, it is the customer's responsibility to assess the load bearing capacity of the ground and determine what weight of vehicle it is capable of safely supporting. Traversing of steel tracked vehicles will damage the tread of the Ground Guard and may result in damage charges. To prevent damage, the Ground Guard should be laid pedestrian side up if steel tracked vehicles are to be traversed. Operation in straight lines is permitted.

Ground Protection



Desc.	Double Joiners
Wt.	0.74kg
Code	**GMAT02**

Desc.	Single Joiners
Wt.	0.26kg
Code	**GMAT03**

How to avoid damaged turf

Planning the use of Ground-Guards into your job before you start can save you from ruining your turf, and the extra safety that they provide could also save someone from having a serious accident.

Ground-Guards feature a patented diamond design giving the maximum traction in the wet and dry as well as reducing sideways movement and slippage. They have now become recognised as standard equipment for use on many sites. This is largely due to the fact that they are virtually indestructible.

The use of a geo-textile membrane is recommended where the ground guard will be used in very wet conditions, long term applications or where heavy vehicles will be used.

1 Load of Ground-Guards = 32 Loads of Stone!

A large arctic lorry can hold 500 Ground-Guards. Enough to make a 600m roadway.
To do that in stone, 3m wide and 250mm deep requires excavating and shifting 450m^3 of earth and bringing in approximately 32 x 25 tonne lorry loads of stone. Then reversing the whole process afterwards. 64 lorry journeys compared to 2 for Ground-Guards!

Ground Protection

Road Mats & Plates

- Easy to install ground protection for pedestrians, planes and vehicles up to 80 tonnes.
- Fast, temporary access, working areas and trackways.
- Unique non-slip reflective markings for night safety (optional).
- Unique 'Cats Eyes' reflectors for night safety (optional).
- Save time and money in reinstating ground.
- Made from 100% recycled High Density Polyethylene (HDPE) reduces landfill waste and cost.
- Avoid severe rutting eco damage to environmentally sensitive areas.

Products	Roadmat Light	Road Plate Oxford 15/5	Endura Mat Large	Endura Mat Small
Thickness (mm)	14	12	12	12
Width (mm)	1200	500	1220	1220
Length (mm)	2400	1500	2440	1220
Weight (kg)	35	32	32	16
Weight Tested (Tonnes)	Up To 60	Up To 40	Up To 80	Up To 80
Material	100% Recycled Hdpe	-	-	-
Traction	High Definition Chevron Traction System	-	-	-
Connectivity	Various Steel And Hdpe Connections Available	-	-	-

Ground Protection

Road Plates

Steel

- 3/4" Steel plate
- 4 Lifting holes per plate
- Available in sizes 8' x 4' and 6' x 4' with or without an anti-skid coated surface
- Anchor holes after coasted surfaces

Ground Protection

Trench Struts

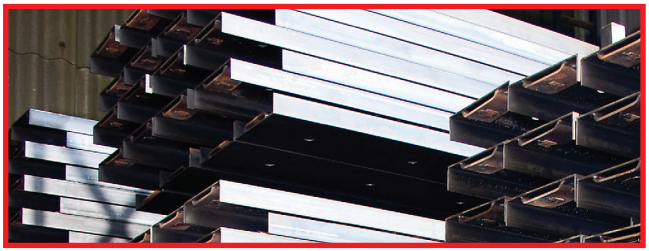
Available stock in four sizes, Altrad Generation's Trench Struts feature clawed base and head plates to enable a better grip to the trench lining and hold it tightly in place preventing collapse.

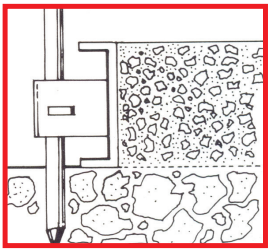
All struts are manufactured to BS4074:2004 and are thread rolled to ensure there is no cutting away of material or loss of strength.

- Safe Working Load (SWL) of 3 tonne at any length.
- Outer Tube: 60.3mm dia / Inner tube: 48.3mm dia.
- Base and Head Plate: 75mm x 75mm x 6mm
- Clawed c/w 2 nail holes.

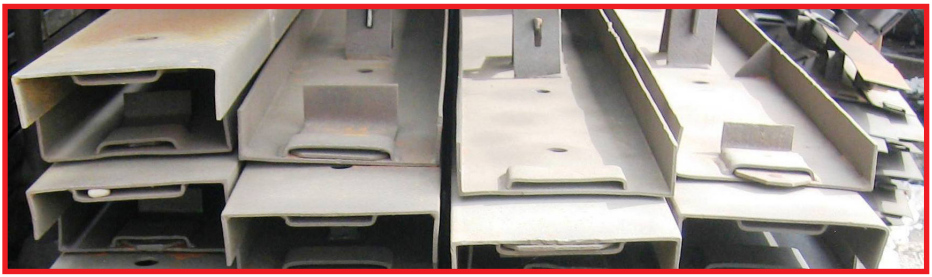
Code	Size	Height (mm)	Weight
TREN00	0	0.32m - 0.47m	4.99kg
TREN01	1	0.49m - 0.73m	6.58kg
TREN02	2	0.69m - 1.09m	8.62kg
TREN03	3	1.03m - 1.73m	8.62kg

Roadforms





Roadforms provide a simple, robust, accurately aligned edge formwork for use when constructing ground slabs, roadways, pathways and foundations up to 300mm. Made of strong square section steel and using a series of ground stakes to secure in place. Roadforms create a smooth uniform finish to any poured concrete slab. Each Roadform is tongued to allow continuous runs.



Square Edged Roadforms are suitable for all types of edge formwork necessary for the construction of ground slabs, roadways, foundations and footings, etc. Three welded stake housings are incorporated together with a locking tongue for accurate alignment of adjacent forms.

Code	Product	Depth (mm)	Length (mm)	Weight
ROAD01	6" Standard Roadform	150	3000	25.80kg
ROAD05	8" Standard Roadform	200	3000	30.50kg
ROAD07	12" Standard Roadform	300	3000	50.00kg
ROAD02	600mm x 22mm Stake	-	-	2.00kg
201147	5 Litre Mould Oil	-	-	5.00kg

Notes

Find Your Nearest Branch:

Simply scan the QR code and input your postcode by clicking on 'Find your local branch', our website will then show the nearest branch to your location.

Altrad Generation Dublin West
Killeen Road, Bluebell,
Dublin,
D12 KXE6
Tel. +353 1 601 1500
dublinwest@altradgeneration.com

Altrad Generation Cork
Watergrasshill Business Park,
Watergrasshill, Co. Cork,
T56 AE06
Tel. +353 21 488 9850
cork@altradgeneration.com

Altrad Generation Dublin North
Old Swords Road, Cloghran, Santry,
Dublin 9,
K67 P2T8
Tel. +353 1 901 8690
dublinnorth@altradgeneration.com

GENERATION
HIRE & SALE

Altrad Generation Galway
Airglooney Business Park,
Tuam, Co. Galway,
H54 YT98
Tel. +353 93 60470
galway@altradgeneration.com

Altrad Generation Belfast
Unit 3B, Nutts Corner Business Park,
Belfast,
BT29 4SR
Tel. 028 9082 4880
belfast@altradgeneration.com