

Groundworks Support



mabeyhire.co.uk

Welcome to

mabeyhire

Every construction and infrastructure project brings unique challenges. That's where our expertise makes the difference.

Covering the civil infrastructure, buildings and utilities sectors, we've been using our knowledge and experience on projects from bridging and railways to basements and tunneling for over 60 years.

We're the only temporary works specialists in the country that can work with you from early tender stage, design the right solution, supply all the equipment you need, install that equipment and then dismantle it.

All of this, combined with a national engineering team, the UK's widest range of temporary works equipment and a nationwide network of 16 depots, enables us to deliver the right solition for you, whatever the scale or complexity of your project.

Rapid response

When you need a guick, simple temporary works equipment hire, our network of 16 nationwide depots are ready to deliver or for you to collect.

A complete solution

No other UK temporary works provider can offer a complete in-house solution across design, supply, installation and monitoring for planned, reactive and emergency projects.

Immersive technology

Explore your design like never before with EVE. Take a virtual walk through your project and identify any changes or potential risks before any work begins on site.

What makes **Mabey Hire different?**



Widest range

We have the UK's widest range of temporary works equipment, including groundworks, propping & jacking, formwork & falsework, temporary bridging & access and monitoring.

All the technical info you need

Instantly access a standard design solution from our standard solutions platform, MyConstruct or find all user guides, Revit families and AutoCAD files on our Tech Hub.

O

Working across all sectors

We have decades of experience helping our customers build, maintain and repair our country's infrastructure, utilities and buildings.



Taking responsible action

We're committed to protecting the planet, caring for our people and communities, and being a responsible business.



We believe in a world without boundaries. At Mabey Hire, we take your project vision and make it our challenge to engineer the right temporary works solution to bring it to life.

Our large, 70-strong team of qualified and professional engineers, are dedicated to using our creative engineering approach to deliver some of the most exciting construction and infrastructure projects in the country.

For customers who would like us to take away the complexity of managing the enabling stage of multi-phase, multi-partner projects, our expert teams can design, supply and install.

Read on to find out more, or talk to us about your project today on: 0330 191 3455 or email: action@mabeyhire.co.uk.

An engineered solution tailored to your needs

Design brief

Our engineering team will work with you to understand the challenges at the critical early stage of the project. This can also include on-site visits from our local field engineers making sure we get the design brief just right, ensuring that the temporary works aspect of a project does not impact any other parties on site.

Project Solution

We have the widest range of temporary works equipment, from propping to groundworks, to temporary access and much more. Our engineers have everything to hand to design the complete solution within the constraints of your project.

Analysis

Using the latest tools such as 3D Stress Analysis programmes, FEA (Finite Element Analysis) and Soil Interaction software, our experienced, qualified engineers design and check every scheme.

Site Liaison & RAMS

Our team work with you to schedule the project and ensure our solution is delivered at the right time, in the right sequence, every time.

Site Services

Unique to the temporary works market, we have experienced site teams to install our kit. This unique service reduces project complexity and alleviates risks and delays, and is available across our range of services.

Handover

Our experienced engineers will assess the assembly and installation of the scheme, if necessary, detail amendments from the original design and provide a handover certificate.

У



Monitoring

Completing our end-to-end engineered solution for your project, our structural and environmental monitoring solutions, with real-time data help you understand the behaviour of your structure or building environment.

Emergency response

We know that sometimes situations develop quickly, or disaster strikes and you need a fast, efficient response.

In an emergency, our customers can rely on us. As soon as you share your challenge with us, we will work 24/7 to resolve it. For some emergencies this means joining you at the site at any time, day or night.

You can call our emergency response team any time on 03303 119 824.



As an award winning temporary works specialist, we have over 60 years' experience designing and implementing temporary groundworks schemes for buildings, infrastructure, utilities, highways etc.

Getting it right in groundworks is fundamental to successful construction and infrastructure projects. The right products, design and implementation saves time, removes safety risks and lowers cost.

With our comprehensive range covering trench boxes, drag boxes, trench sheeting, hydraulic bracing systems, ancillary equipment and our Shoresafe range of excavation safety

solutions, we have everything you need to get that key first stage of construction completed safely and on time.

So whether you need groundworks support for trenching or a more complex solution for a basement construction, we have the expertise to design and supply you with the best solution.

Read on to find out more, or talk to us about your project today on: 0330 191 3455 or email: action@mabeyhire.co.uk.





Trenching Our range offers groundworks products specific for utilities.



Excavation

With solutions for general excavations, tank excavations or irregular shaped excavations, we have everything covered.



Retaining/single-sided excavations

Our groundworks struts can also be used as raking props for single sided excavations.

The right product for every project

Equipment

| Trench Boxes | Typically used in t is dry |
|--------------------------|------------------------------------|
| Manhole Boxes | Typically used for where grour |
| Drag Boxes | Typically used i ground is dry |
| Rolling Strut Boxes | Typically used in t is dry |
| Trench Sheets and Frames | Typically used in e This equip |
| Sheet Piles and Frames | Typically used in conditions. This |

- 1. The table above suggests only typical uses of the different types of shoring equipment based upon recommendations given in the CPA-STIG document "Selection of Proprietary Shoring Equipment". This table should not be relied upon as a design guide.
- 2. All excavations are unique and should always be assessed by a competent person to ensure that the correct equipment and an appropriate safe system of work are used at all times.
- 3. Your attention is drawn to CDM Regulations 2015, which state that by selecting a piece of equipment, you undertake certain responsibilities as a 'designer'.
- 4. If in doubt about the application of any equipment, please contact Mabey Hire.

Source - CPA Safety Guidance on Selection of Proprietary Shoring Equipment.

For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk

call us on 0330 191 3455 or email action@mabeyhire.co.uk



Ground Conditions

trenches up to 4m wide, and up to 5.6m deep where ground ry and stable and there are no services present

r square excavations up to 4.5m wide, and up to 5.4m deep nd is dry and stable and there are no services present

in trenches up to 5.3m wide, and up to 4.9m deep where y and self-supporting and there are no services present

trenches up to 4m wide, and up to 6.4m deep where ground y and stable and there are no services present

excavations up to 6m deep in a variety of ground conditions. ipment can accommodate the presence of services

in larger and/or deeper excavations in a variety of ground is equipment can accommodate the presence of services



Our comprehensive range of lightweight shoring equipment provides the ideal solution for smaller, short term shoring applications in restricted areas.

The lightweight nature of this range means it can be handled either by hand or with smaller excavators, making it ideally suited for minor works and utility maintenance in cities and urban environments.

Vertishore

A hydraulic vertical shoring solution for use in shallow excavations.

MAP Box

Aluminium Trench Shield Lightweight shield to protect workers when installing utilities.

Aluminium Waler

Lightweight aluminium, hydraulic bracing system providing 2 sided support.

Flexible, modular system able to accommodate existing services with 2, 3 or 4 sided options in various sizes.

Vertishore

Our Vertishore is made from 2 aluminium rails, supported against trench walls by a pair of hydraulic rams which are expanded by a manually operated hand pump. It is lightweight and ideally suited to shallow trenching in self-supporting ground up to 2.1m deep and 1.6m wide.

Key Features:

- Safe to install lowered into trench from above ground
- For depths up to 2.1m and widths of 1.6m
- Quick to use preassembled to size with struts already attached to rails
- Lightweight and compact easy to handle, manoeuvre and store



MAP Box

An extremely lightweight and flexible shoring solution, our MAP Box is ideal for shallow shoring applications in self-supporting ground. Its modular nature means the components are able to form a range of box sizes, from a 1.3 x 0.6m 2-sided trench box, to a 2.5m x 2.5m 4-sided manhole box.

Key Features:

- · Lightweight individual components weigh up to 18kg
- Flexible one set of components can create many different 2, 3 or 4-sided box configurations
- · Quick and easy to construct small, lightweight components are easy to handle and install
- · Its modular nature allows panels to be omitted to allow services through



1.5n

| Overall size - length x height (m) | 1.3 x 1.5 |
|------------------------------------|-----------|
| Max trench depth (m) | 1.5 |
| Min & max trench widths (m) | 0.6-2.6 |
| Max under strut clearance (mm)* | 655 |
| Length between struts (mm) | 1192 |
| Assembled weight (kg) [^] | 135-261 |
| | |

For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk



| n tall MAP box | | 2.1m tall MAP box | | |
|----------------|-----------|-------------------|-----------|-----------|
| 1.9 x 1.5 | 2.5 x 1.5 | 1.3 x 2.1 | 1.9 x 2.1 | 2.5 x 2.1 |
| 1.5 | 1.5 | 2.1 | 2.1 | 2.1 |
| 0.6-2.6 | 0.6-2.6 | 0.6-2.6 | 0.6-2.6 | 0.6-2.6 |
| 655 | 555 | 755 | 655 | 555 |
| 1792 | 2392 | 1192 | 1792 | 2392 |
| 172-298 | 209-335 | 177-365 | 229-417 | 281-469 |

* Note: In order to achieve a capacity of 16.5kN/m² ^ Note: Min and Max weights are inclusive of 2/3/4 sided assemblies

Aluminium **Trench Shields**



High Clearance Strut available - ideal for Under Track Crossings (UTX)





A lightweight, 2 sided protective shield, ideal for use when installing utility pipes in areas where any obstructions such as services, are not present. Its lightweight nature makes it the perfect solution for excavations undertaken with small excavators in good, dry, self-supporting ground.

Key Features:

- Available in 2 lengths (1.2m and 2.4m)
- Lightweight ideal for use with a small excavator
- · Pinned struts for ease of assembly
- When fitted with High Clearance Struts, an 800mm clearance under struts can be achieved, ideal when working on under track crossings (UTX)

| | Aluminium T | rench Shields |
|--|-------------|---------------|
| Size - length x height (m) | 1.2 x 1.2 | 2.4 x 1.2 |
| Capacity (kN/m ²) | 20 | 20 |
| Max trench depth (m) | 2.3 | 2.3 |
| Min. & max. trench widths (m) | 0.56-1.86 | 0.66-1.96 |
| Under strut clearance (mm) | 290 | 290 |
| Under strut clearance with high clearance strut (mm) | 800 | 800 |
| Length between struts (mm) | 950 | 1800 |
| Box weight* (kg) | 105-126 | 179-200 |
| Extension available | 1.2m | 1.2m |
| High clearance strut available | Yes | Yes |
| End closure panels available | No | No |
| | | |

*Box weight is dependent on which struts are used

Aluminium Waler System

Our lightweight aluminium waler systems are designed to provide 2 way support to small trenches when used in conjunction with trench sheets.

The system is ideal for use when installing or working around utilities/services where trench boxes are not suitable and where quick and easy installation is required.

In deeper excavations, where more than one waler set will be used, our waler rails features connection points to allow the attachment of restraint chains from one waler rail to another to aid assembly and removal.

Our end units provide extra support when trench ends have not been battered back.



Key Features:

- · Lightweight aluminium bracing system
- · Quick and easy to install
- Suitable for trench widths from 657mm to 4317mm
- Clear internal dimensions between 490mm - 3950mm
- Can suspend from one another .
- End Units provide additional safety

For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk

| Waler length (m) | Waler weight (kg) |
|------------------|-------------------|
| 1.5 | 18 |
| 2 | 23 |
| 3 | 34 |
| 4 | 45 |
| 5 | 56 |

End Units also available



Trench Boxes

Used for rapid shoring of trench runs, box systems provide a quick and easy way of holding the ground stable. This makes them the perfect solution for the safe installation of services in conditions where the control of ground movement is not critical. Our comprehensive range of box systems covers options for excavators with limited lifting capacity, a variety of trench depths and different clearance levels allowing for the laying of wider diameter pipework. All of our systems have been developed to provide a safe solution whilst also benefitting from many features such as pinned connections and telescopic struts making them easy to use on site.

Drag Box

Trench Box

Rolling Strut Box

Manhole Box

Backhoe Boxes

Front cutting edge to enable the excavate and drag method. **A rapid means of pipe laying** in self supporting ground.

Most commonly used box system, available in a range of options for the **installation of various utilities** to ground support for trenches up to 5.6m deep.

Vertically adjustable struts for use within **stepped excavations** and offering **increased clearance** for pipe laying.

Provides additional trench wi chambers.

Lightweight trench and manhorismon-critical.



Provides additional trench width to allow the construction of manhole

Lightweight trench and manhole boxes ideal for use where ground movement

Drag Boxes

A simple to use, 2 sided protective shield, ideal for use when installing utility pipes in dry, self-supporting ground in areas where any obstructions such as services, are not present. Our large range of drag boxes have a front cutting edge to enable the 'excavate and drag' technique, which provides a safe and rapid means of pipe laying, enabling quicker installation.

Key Features:

- Available in 6 different sizes
- Telescopic struts allow for trench widths of 0.68m to 5.3m wide
- Extensions available, increasing the maximum trench depth to 4.9m
- · Pinned struts for ease of assembly
- Hogback struts available for increased clearance to 2m, enabling the installation of 1.5m diameter pipes*
- Designed to give extended clearance between struts enabling the easy installation of longer pipe sections

*Available with 5m & 7m long drag boxes only



Mi



Ask about our hogback struts for increased clearance

| | Mini | Midi | Maxi | Heavy | y Duty | High Clearance |
|-------------------------------|-----------|-----------|-----------|------------|------------|-------------------|
| Size - length x height (m) | 3 x 2 | 4 x 2 | 5 x 2 | 5 x 2.5 | 7 x 2 | 5.1 x 3.2 |
| Capacity (kN/m ²) | 25 | 20 | 20 | 35 | 34 (28*) | 25 |
| Max trench depth** (m) | 3.9 | 2.9 | 2.9 | 3.9 | 3.9 | 4.9 |
| n. & max. trench widths (m) | 0.68-3.08 | 0.68-3.08 | 0.71-3.11 | 0.81-2.66 | 0.94-2.79 | 1-5.3 |
| Under strut clearance (m) | 1.01-1.2 | 1.01-1.2 | 1.01-1.2 | 1.48-1.97* | 1.25-1.75* | 1.22-2.28 |
| Length between struts (m) | 2.65 | 3.65 | 4.65 | 3.73 | 6.35 | 4.5 |
| Box weight*** (kg) | 970-1960 | 1480-2670 | 2280-3780 | 3761-7094 | 4341-5036 | 3846-9468 |
| Extension available | 1m | 1m | 1m | 1.5m | 2m | 1.8m |
| Hogback struts available | No | No | No | Yes | Yes | No |
| nd closure panels available | No | No | No | No | No | No |

*Using hogback struts **Max trench depths are achieved by using a box and an extension ***Box weight indicated is with minimum strut lengths

Trench Boxes

Easy to assemble, this 2 sided protective shield provides quick and efficient ground support in the installation of utility services when ground movement is non-critical and in areas where any obstructions such as services are not present.

Combining articulated struts and a bottom cutting edge, our trench boxes are designed to be installed by an excavator, using the push and dig technique.

With a range of options from lightweight to high clearance trench boxes, we can facilitate most trenching requirements.

Key Features:

- Available in 3 variants ranging from mini to high clearance
- A selection of struts allow for trench widths of 0.65m to 5.07m wide
- Top extensions available, increasing the maximum trench depth to 5.6m
- · Pinned struts for ease of assembly
- Bottom cutting edge to ease
- 'push and dig' technique
- End closure panels available

View our extensive range of accompanying safety equipment from page 48



For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk

| height (m) 3 x 2 3.5 x 2.63 3.5 x 4 y (kV/m²) 22-25 35-39.5 25-36 depth (m) 4 5.2-5.6 5.2 ridths (m) 0.65-4.9 0.72-5.07 1.34-4.76 rance (m) 0.92-1.27 1.51-1.55 2.55 struts (m) 2.62-2.69 3.11-3.19 3.05 ight* (kg) 1139-4420 2068-4930 3815-6220 | | Mini Trench Box | Standard Trench Box | |
|---|------------|-----------------|---------------------|-----------|
| depth (m) 4 5.2-5.6 5.2 idths (m) 0.65-4.9 0.72-5.07 1.34-4.76 rance (m) 0.92-1.27 1.51-1.55 2.55 struts (m) 2.62-2.69 3.11-3.19 3.05 | neight (m) | 3 x 2 | 3.5 x 2.63 | 3.5 x 4 |
| ridths (m) 0.65-4.9 0.72-5.07 1.34-4.76 rance (m) 0.92-1.27 1.51-1.55 2.55 struts (m) 2.62-2.69 3.11-3.19 3.05 | y (kN/m²) | 22-25 | 35-39.5 | 25-36 |
| rance (m) 0.92-1.27 1.51-1.55 2.55 struts (m) 2.62-2.69 3.11-3.19 3.05 | depth (m) | 4 | 5.2-5.6 | 5.2 |
| struts (m) 2.62-2.69 3.11-3.19 3.05 | vidths (m) | 0.65-4.9 | 0.72-5.07 | 1.34-4.76 |
| | rance (m) | 0.92-1.27 | 1.51-1.55 | 2.55 |
| ight* (kg) 1139-4420 2068-4930 3815-6220 | struts (m) | 2.62-2.69 | 3.11-3.19 | 3.05 |
| | ight* (kg) | 1139-4420 | 2068-4930 | 3815-6220 |
| nhole box Yes Yes Yes | nhole box | Yes | Yes | Yes |
| available Yes Yes Yes | available | Yes | Yes | Yes |
| available [^] Yes Yes Yes | available^ | Yes | Yes | Yes |

*Box weight is dependent on which struts are used *Maximum end closure panel use is 2.8m box width



Rolling **Strut Box**

A two sided protective shield with the added advantage of struts which are vertically adjustable on rollers, this box is the ideal solution to provide support within stepped excavations. Strut positions can be adjusted in adjacent boxes along a trench, thus allowing longer pipe runs to be installed more efficiently and maximising effective man hours on site.

Key Features:

- The rolling strut enables the panels to move independently of each other during installation and removal
- Ideal for stepped excavations
- · Vertically adjustable struts that can be locked into place
- Top extension available, increasing the maximum trench depth to 6.4m
- Struts allow for trench widths of 1.16-6.91m
- Bottom cutting edge to ease 'push and dig' technique

| | Rolling Strut Box |
|-------------------------------|-------------------|
| Size - length x height (m) | 3.5 x 4 |
| Capacity (kN/m ²) | 35-48 |
| Max trench depth (m) | 6.4 |
| Min. & max. trench widths (m) | 1.16-6.91 |
| Under strut clearance (m) | 1.4-3.2 |
| Length between struts (m) | 2.84 |
| Box weight* (kg) | 4740-13153 |
| Extension available | 2.5m |
| End closure panel available | No |
| | |

*Box weight is dependent on which struts are used

Did you know... you can achieve working heights of up to 3.2m below the struts in a trench depth of up to 6.4m







Manhole **Boxes**

Our range of manhole boxes are designed for use in conjunction with our other box systems, to provide additional trench width to allow the construction of any associated manhole chambers.

Key Features:

- Available in 9 different sizes ranging from 2-4.5m in length
- Allows installation of manhole rings up to 3m in diameter
- Bottom cutting edge for ease of installation
- Suitable for trench depths up to 5.4m •
- · Lightweight options designed for use with small excavators with limited lifting capacity (see page 14)
- Compatible with End Closure Panels

2.1 x 2

Mini Manhole Box

| Capacity (kN/m²) | 20 |
|---|-----------|
| Max trench depth (m) | 2.9 |
| Min. & max. trench widths (m) | 1.54-3.14 |
| Under strut clearance (m) | 1.15 |
| Length between struts (m) | 1.87 |
| Box weight (kg)* | 1200-1748 |
| To suit max. ring sizes (mm) | 1350 |
| Top extension available | 1m |
| End closure panels available [^] | Yes |
| | |

Size - length x height (m)

For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk

call us on 0330 191 3455 or email action@mabeyhire.co.uk





| Standard Manhole Box | | | | |
|----------------------|-----------|-----------|-----------|-----------|
| 2.5 x 2.5 | 3 x 2.5 | 3.5 x 2.5 | 4 x 2.5 | 4.5 x 2.5 |
| 35-40 | 35-40 | 35-40 | 35-40 | 35-40 |
| 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| 2.06-3.96 | 1.7-3.96 | 1.7-3.96 | 2.87-4.77 | 2.87-4.77 |
| 1.49 | 1.49 | 1.49 | 1.47 | 1.47 |
| 2.23 | 2.73 | 3.23 | 3.7 | 4.2 |
| 2216-4254 | 2376-4554 | 2726-4910 | 3342-6040 | 4618-8000 |
| 1350 | 1800 | 2100 | 2700 | 3000 |
| 1.5m | 1.5m | 1.5m | 1.5m | 1.5m |
| Yes | Yes | Yes | No | No |

*Weight of box with smallest struts to weight of box with extension and largest struts ^Maximum end closure panel use is 2.8m box width

Backhoe Boxes

Our backhoe boxes are available in a range of options from backhoe trench boxes to backhoe manhole boxes.

Our backhoe boxes are ideal for use on construction sites and projects where ground movement is non-critical. Their lightweight nature makes them the perfect solution for use with smaller 180° backhoe rubber tyred excavators.

Weighing less than 900kg, this solution is ideal where limited lifting capacity exists on site.

Key Features:

- Lightweight minimum weight of 900kg
- Backhoe options for trench and manhole boxes • Top extensions available, increasing the maximum
- trench depth to 2.9m Load capacity of 20kN/m²
- End closure panels available







| | Backhoe Box | | ole Box |
|---|-------------|-----------|-----------|
| Size - length x height (m) | 2.84 x 2 | 2.5 x 2 | 3 x 2 |
| Capacity (kN/m²) | 20 | 20 | 20 |
| Max trench depth (m) | 2.9 | 2.9 | 2.9 |
| Min. & max. trench widths (m) | 0.73-2.33 | 2.44 | 2.94 |
| Under strut clearance (m) | 1.2 | 1.2 | 1.2 |
| Length between struts (m) | 2.66 | 2.25 | 2.75 |
| Box weight (kg)* | 886-1399 | 1004-1560 | 1100-1714 |
| To suit max. ring sizes (mm) | N/A | 1350 | 1800 |
| Top extension available | Yes | 1m | 1m |
| End closure panels available [^] | Yes | Yes | Yes |
| | | | |

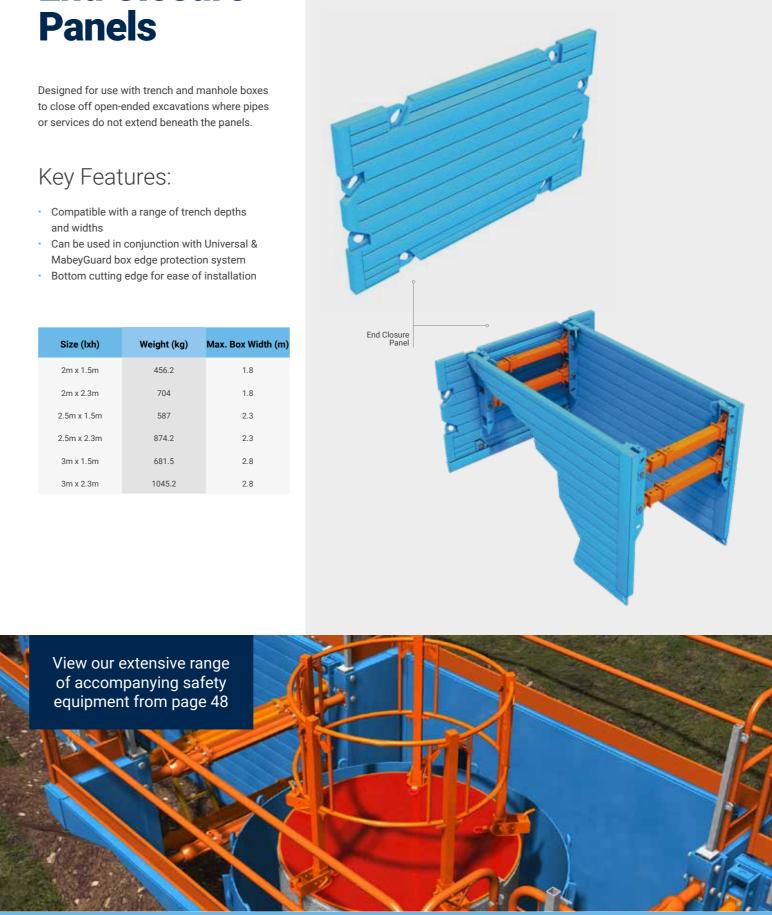
*Box weight is dependent on which struts are used

20 Back

End Closure

- and widths
- Can be used in conjunction with Universal & MabeyGuard box edge protection system

| Size (Ixh) | Weight (kg) | Max. Box Width (m) |
|-------------|-------------|--------------------|
| 2m x 1.5m | 456.2 | 1.8 |
| 2m x 2.3m | 704 | 1.8 |
| 2.5m x 1.5m | 587 | 2.3 |
| 2.5m x 2.3m | 874.2 | 2.3 |
| 3m x 1.5m | 681.5 | 2.8 |
| 3m x 2.3m | 1045.2 | 2.8 |
| | | |



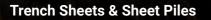
With over 600 pre-engineered Groundworks designs available, find your standard solution today at: mabeyhire.co.uk/standardsolutions

Sheets & Frames

Choose the right trench sheets, bracing systems, safety equipment and ancilliaries required for the size and complexity of your project.



0





Frames



RA

S.



Struts

Safety Equipment



Ancillaries

Trench Sheets, Sheet Piles and Installation & Extraction Equipment

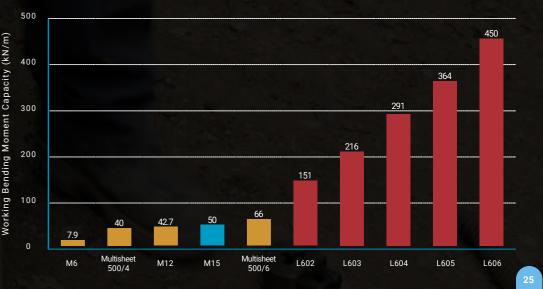
Trench sheets and light piling helps provide support to the sides of trenches and excavations. The Mabey Hire sheeting range covers both overlapping and interlocking trench sheet profiles. Ranging from 2m - 7m in length, they are ideal for any project, large or small, deep or shallow.

Designed to support the vertical faces of larger excavations, we also offer steel sheet piles, offering greater strength and water tightness where required.

Use our comparison chart to find the right trench sheet for your project.



Sheet Piles





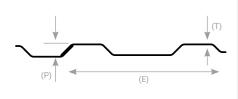
Trench Sheets & Sheet Piles

Our range of trench sheeting and light piling covers overlapping, interlocking trench sheets and sheet piles, offering a solution for every type of project.

Overlapping Trench Sheets

Overlapping trench sheets are an ideal choice for small to medium depth excavations where the exclusion of water is not required.

All our overlapping trench sheets are available for hire or sale.



[E] Effective Width (mm)[P] Pan Height (mm)[T] Thickness (mm)

Interlocking Trench Sheets

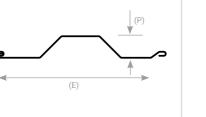
Interlocking trench sheets are an excellent alternative for more demanding applications which need greater resistance to water ingress, for example high water tables. Interlocking elements produce a continuous, linked wall of sheet. Corner profiles are also available.

All our interlocking trench sheets are available for hire or sale.

[E] Effective Width (mm)

[P] Pan Height (mm)

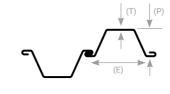
[T] Thickness (mm)



Sheet Piles

Our steel sheet piles are designed for use within larger excavations where water tightness and high strength is required. They are interlocking so produce a continuous, linked wall of sheet. Corner profiles are also available.

All our Sheet Piles are available for hire or sale.



[E] Effective Width (mm) [P] Pan Height (mm) [T] Thickness (mm)

Trench Sheet Installation & Extraction Equipment

Release Shackles

Our Release Shackles have been developed for lifting single trench sheets into position prior to driving into the ground. Once the sheet is held securely, the shackle can be released safely by an operative at ground level.

Key Features:

- No working at height required because the rope attachment allows shackle to be released from the ground
- · Compatible with all Mabey Hire trench sheets
- Euro Ground Release Shackle has a safety ring detail which prevents accidental release

| | Overlapping Trench Sheets | | | ets | Interlocking Trench Sheets | Sheet Piles | | | | |
|---|---------------------------|---------------------|------|---------------------|----------------------------|-------------|-----------|-----------|-----------|-----------|
| | M6 | Multisheet 500/4 | M12 | Multisheet 500/6 | M15 | L602 | L603 | L604 | L605 | L606 |
| Lengths Available | 2-4m | 3-6m | 3-7m | 4-7m | 3-7m | Various\$ | Various\$ | Various\$ | Various\$ | Various\$ |
| Effective Width (mm) | 394 | 480 | 550 | 480 | 494 | 600 | 600 | 600 | 600 | 600 |
| Pan Height (mm) | 38 | 78 | 87.5 | 75 | 75 | 310 | 320 | 390 | 420 | 430 |
| Thickness (mm) | 3.55 | 4 | 6 | 6 | 6 | 8.4 | 9.6 | 10 | 12.3 | 15.8 |
| Weight (kg/m) | 12.5 | 21.1 | 31.8 | 31.6 | 33.5 | 53.4 | 64.2 | 73.1 | 82.1 | 93.9 |
| Section Modulus (cm ³ /m) | 46 | 125.8 | 182 | 178.2 | 186 | 842^ | 1200^ | 1618^ | 2021^ | 2502^ |
| Working Bending Moment Capacity (kN/m) | 7.9 | 40 | 42.7 | 66 | 50 | 151^ | 216* | 291^ | 364^ | 450* |

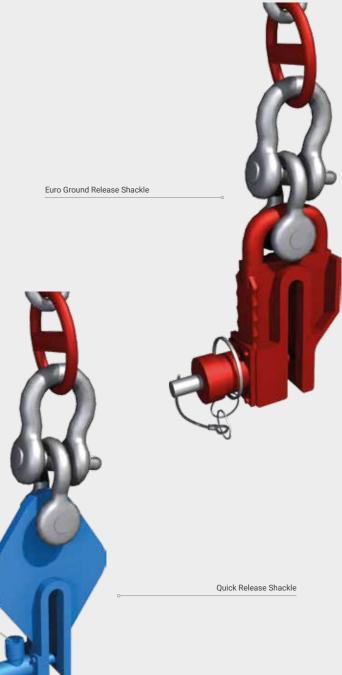
\$A range of sections and lengths available to meet strength and driveability requirements ^Piles are classed as steel grade 270 - Other grades of steel available for sale

The table above shows the most common Sheet piles, an extensive range of sheet piles is available for Hire & Sale including Larssen, GU & PU ranges

Quick Releas

Euro Ground Releas

| | Safe working vertical Load (kN) | Weight (kg) |
|------------|---------------------------------|-------------|
| se Shackle | 40 | 18 |
| se Shackle | 40 | 17.5 |
| se Shackle | 40 | 17.5 |



Drive Caps

Our Drive Caps fit onto the top end of trench sheets in order to improve driveability and to protect the sheets from damage often sustained from the excavator.

Key Features:

- Available in various sizes, to fit the full range of Mabey Hire trench sheets
- Correct use of the Drive Caps can significantly reduce potential damage costs
- Some Drive Caps have lifting rings for safer installation (ask for further details)
- Maximum weight 30kg



Excavator Mounted Vibrators

Our slim design Excavator Mounted Vibrators are the ideal solution for driving and extracting all our trench sheets quickly and easily using high frequency vibrations to disturb the ground. They can be attached directly to the boom of the excavator or via a range of quick hitch adaptor brackets.

Key Features:

- · Range of models available to fit various sizes of excavator
- Our EMVs are designed to be low height, maximising the reach of the excavator enabling the driving of our longest trench sheets
- High power to weight ratio
- Automatic hydraulic clamp operation • We have a dedicated Piling Attachment Service Team who are available to ensure the safe & efficient installation on-site

| | EMV 300 | EMV 400 | EMV 450 |
|------------------------------|---------|---------|---------|
| Centrifugal force (kN) | 300 | 400 | 453 |
| Max. push / pull force (T) | 15 | 15 | 15 |
| Typical excavator weight (T) | Dec-35 | 25-45 | 25-45 |





Need to measure the levels of vibration? Our Portable Vibration Monitor is the ideal short term monitoring solution.

Trench Sheet Extractors

Our Trench Sheet Extractors are used for the safe and efficient removal of trench sheets. Some designs have the added health and safety benefit of being fitted with a secondary safety device which is independent of the main attachment point. The secondary safety chain helps to minimise the risks associated with incorrect attachment, damages or other failures and will not result in the trench sheet becoming detached from the extractor.

Key Features:

- · Available in a variety of sizes dependent on the thickness of the trench sheets
- Enables the rapid removal of trench sheets
- Maximum weight 24kg

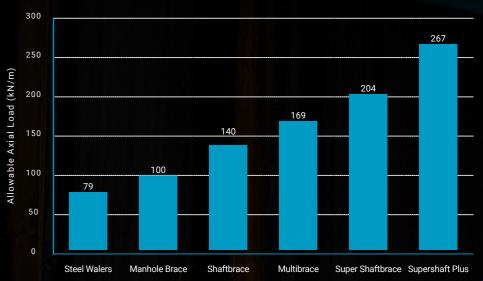


Excavation Bracing Frames

Our wide range of excavation bracing frames provide support solutions to excavations, with the capability to support clear spans of up to 25m.

With a vast range, available in steel or aluminium, mechanical or hydraulic and with a range of load carrying capacities, combined with our bracing struts, we ensure that we have the range that meets the needs of any project.

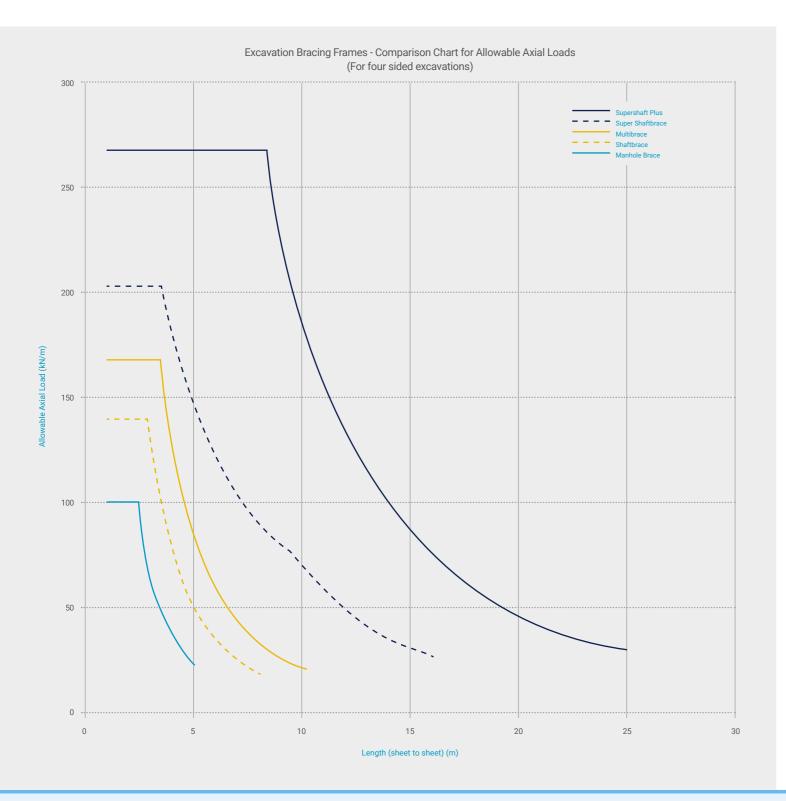
| Bracing Frames | Allowable Axial Load (kN/m) |
|-------------------|--------------------------------|
| Steel Walers | 79 |
| Manhole Brace | 100 |
| Shaftbrace | 140 |
| Multibrace | 169 |
| Super Shaftbrace | 204 |
| Supershaft Plus | 267 |
| | |





Excavation Bracing Frames

Our range of excavation bracing frames support sheeted excavations. Use our allowable load capacity comparison chart to ensure you find the right bracing system for your project.



Steel Waler System

Our steel waler systems are designed to provide 2 way support to small trenches when used in conjunction with trench sheets.

This system is available in both steel and heavy duty varieties and in a range of lengths from 2m to 5m to suit your application. The waler rails are connected with our hydraulic struts which are pressurised using our manually operated hydraulic hand pump, allowing the system quickly and easily adjust to your trench width.

Key Features:

- Lightweight aluminium bracing system available
- Quick and easy to install
- Suitable for trench widths from 657mm to 4317mm
- Clear internal dimensions between 490mm - 3950mm



For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk

Steel Walers

| Waler length (m) | Waler weight (kg) |
|------------------|-------------------|
| 2.4 | 90 |
| 3.4 | 132 |
| 4.3 | 165 |
| 5 | 192 |

Heavy Duty Walers

| Waler length (m) | Waler weight (kg) |
|------------------|-------------------|
| 4.3 | 225 |
| 5 | 345 |

Manhole Brace

Our Manhole Braces are the ideal solution for bracing small cofferdams in order to ensure the safe construction of manholes or when carrying out repairs to similar size excavations.

This 4 way hydraulic bracing system, is available in two variants, single and double acting. The single acting variant provides adjustment by means of mechanical and hydraulic extension. The legs are extended hydraulically and retracted manually. The double acting type extends and retracts using hydraulics.

Key Features:

- Available with either single acting or double acting hydraulic cylinder
- Available in a range of sizes from 1.55m to 5.02m
 Single acting brace clear internal dimensions:
- 1270mm 3930mm
- Double acting brace clear internal dimensions: 1405mm - 4660mm

Single Acting Manhole Brace

| External worki | Weight per log (kg) | |
|----------------|---------------------|---------------------|
| Min | Max | Weight per leg (kg) |
| 1550 | 2110 | 78 |
| 1750 | 2510 | 101 |
| 2360 | 3320 | 119 |
| 3300 | 4260 | 178 |

Double Acting Manhole Brace

| External worki | Weinham and an (lan) | |
|----------------|----------------------|---------------------|
| Min | Мах | Weight per leg (kg) |
| 1765 | 2365 | 216 |
| 2100 | 2700 | 232 |
| 2500 | 3500 | 265 |
| 3345 | 4345 | 300 |
| 4020 | 5020 | 332 |

Shaftbrace

Shaftbrace is a hydraulic bracing system, designed to give clear working areas requiring no cross strutting. A versatile system, encompassing pinned corners and octagonal corner units, allows the bracing of non-square and octagonal excavations. The Shaftbrace system is also compatible with ourDouble Acting Manhole Brace and Multibrace for even greater flexibility.

Key Features:

- Standard leg assemblies cover excavations up to 10.2m* in length, sheet to sheet
- Bracing struts available to increase the lengths of the excavation
- Clear internal dimensions between 1305mm -9705mm
- Compatible with our Light Duty Mechanical Bracing Strut, JC40 Mechanical Bracing Strut, Standard Mechanical Bracing Strut & Heavy Duty Mechanical Bracing Strut



For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk

| External working range (mm) Min Max | | Weight per leg (kg) |
|--|--------|---------------------|
| 1805 | 2405 | 270 |
| 2205 | 3205 | 355 |
| | | |
| 2705 | 3705 | 411 |
| 2955 | 3955 | 423 |
| 3105 | 4105 | 455 |
| 3605 | 4605 | 483 |
| 4105 | 5105 | 500 |
| 4605 | 5605 | 538 |
| 5105 | 6105 | 599 |
| 5605 | 6605 | 592 |
| 6105 | 7105* | 653 |
| 6605 | 7605* | 683 |
| 7105 | 8105* | 707 |
| 7605 | 8605* | 737 |
| 8105 | 9105* | 798 |
| 8605 | 9605* | 792 |
| 9205 | 10205* | 775 |

*Standard leg configurations shown, struts will be required on excavations over 7m



Multibrace

A 4 way hydraulic bracing system, Multibrace has a high load carrying capacity due to a larger section size. It is a flexible solution with standard legs covering excavations up to 10.3m sheet to sheet with bracing struts also available to increase the lengths of the excavation. Multibrace is also compatible with Shaftbrace, Super Shaftbrace and Supershaft Plus, further increasing its versatility.

Key Features:

- Pinned corners allow bracing of non-square excavations
- Bracing struts available to increase the length
 of excavations
- Compatible with other Mabey Hire bracing systems
- Clear internal dimensions between
 1923mm 9786mm
- Compatible with our Light Duty Mechanical Bracing Strut, JC40 Mechanical Bracing Strut, Standard Mechanical Bracing Strut & Heavy Duty Mechanical Bracing Strut

| External work Min | External working range (mm) Min Max | | |
|----------------------|--|-----------|--|
| 2525 | 3525 | 646 | |
| 3275 | 4275 | 805 | |
| 3850 | 4850 | 908 | |
| 4225 | 5225 | 958 | |
| 5075 | 6075 | 1076 | |
| 5925 | 6925 | 1188 | |
| 6775 | 7775 | 1302 | |
| 7250 | 8250 | 1442 | |
| 8100 | 9100 | 1562 | |
| 8475 | 9475 | 1612 | |
| 9325 | 10325 | 1646-1724 | |





Super Shaftbrace

Mabey Hire Super Shaftbrace is a strong and versatile hydraulic bracing system. It extends the range of Shaftbrace up to 16m excavations, and with bracing struts this can be extended even further. Its pinned corners allow the bracing of non-square excavations and its octagonal corner units enables 8-sided excavations.

| Key Features: | 7280 | 8280 | 1780 |
|--|-------|-------|------|
| 5 | 8130 | 9130 | 2040 |
| For excavations up to 15.9m Bracing struts available to increase the lengths | 8980 | 9980 | 2200 |
| of the excavation | 9830 | 10830 | 2455 |
| System enables 8 sided excavations to be constructed | 10680 | 11680 | 2715 |
| Clear internal dimensions between | 11530 | 12530 | 2790 |
| 2140mm - 15190mm | 12380 | 13380 | 3050 |
| Compatible with our Standard Mechanical Bracing Strut, Heavy Duty Mechanical Bracing | 13230 | 14230 | 3230 |
| Strut & Super Bracing Strut | 14080 | 15080 | 3370 |
| | | | |

External working range (mm)

Max

3530

4130

4880

5730

6580

7430

15930

Min

2880

3480

3880

4730

5580

6430

14930

Weight per leg (kg)

897

1107

1160

1430

1600

1690

3530





Supers Plus

The next generation in b Supershaft Plus is a unio This has been designed expertise to offer large of greater areas of clear sp excavations.

The bracing system is se completely remove or si requirement for bracing

This bracing system has used in projects to achie allowing the installation

Key Feature

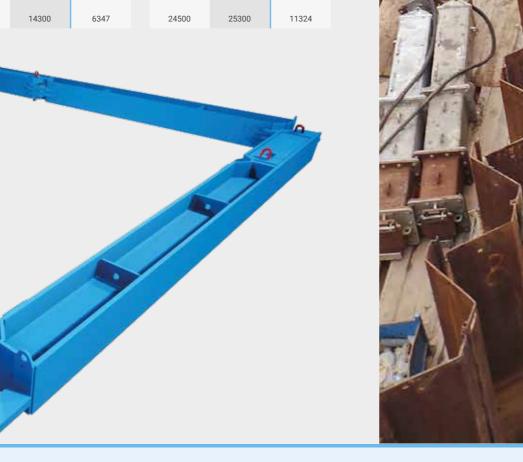
- Can be used in excav without any bracing
- Reduces installation •
- Reduces excavation . obstacles to work arc
- Minimises clashes w • and enables large tar in situ
- Clear internal dimensions between 2000mm - 24300mm
- Compatible with our Super Bracing Strut and Super Bracing Strut-1000

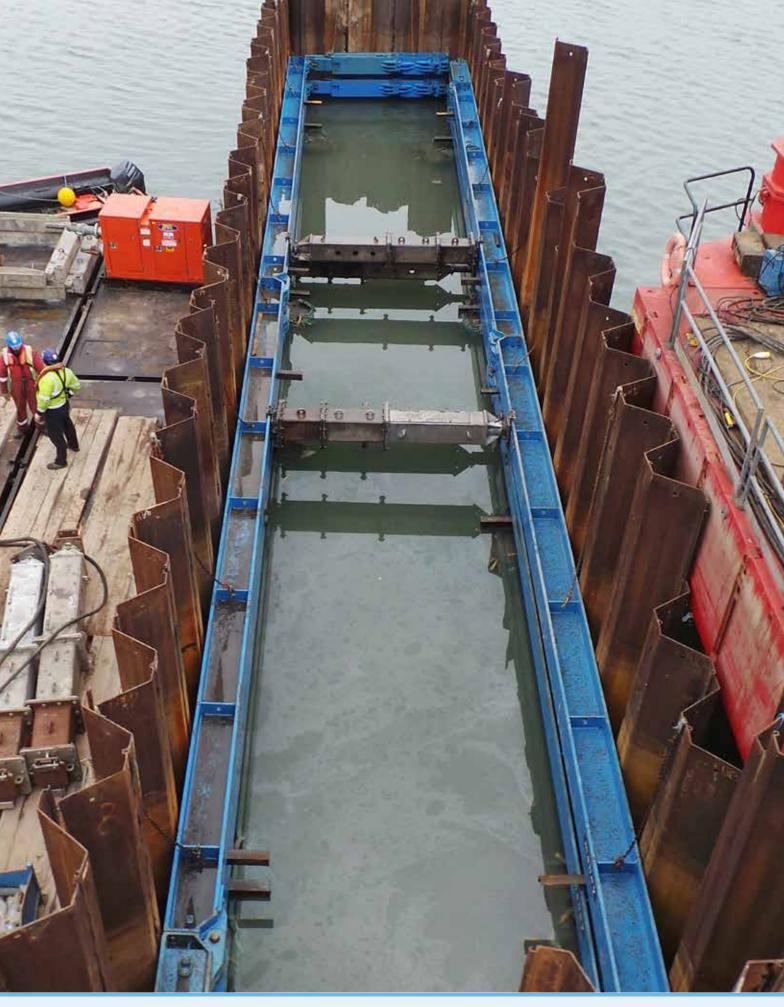
| The size of the clear span is dependent on individual site conditions | |
|---|--|
| and load case. Each project should be designed by a competent | |
| engineer to access the configuration of equipment | |

.

-

| shaft | External worki Min | ing range (mm) Max | Weight per leg (kg) | External workin Min | ng range (mm) Max | Weight per leg (kg) |
|---|-----------------------|-----------------------|------------------------|------------------------|----------------------|------------------------|
| | 3000 | 3800 | 1925 | 14000 | 14800 | 6547 |
| | 3500 | 4300 | 2296 | 14500 | 15300 | 6918 |
| | 4000 | 4800 | 2496 | 15000 | 15800 | 6939 |
| bracing systems, | 4500 | 5300 | 2867 | 15500 | 16300 | 7310 |
| iquely fabricated beam. | 5000 | 5800 | 2888 | 16000 | 16800 | 7510 |
| using our engineering | 5500 | 6300 | 3259 | 16500 | 17300 | 7881 |
| clear spans, allowing pace within large | 6000 | 6800 | 3459 | 17000 | 17800 | 7493 |
| - | 6500 | 7300 | 3830 | 17500 | 18300 | 7864 |
| so strong that it can either | 7000 | 7800 | 3851 | 18000 | 18800 | 8064 |
| ignificantly reduce the | 7500 | 8300 | 4222 | 18500 | 19300 | 8435 |
| struts or knee braces. | 8000 | 8800 | 4031 | 19000 | 19800 | 8133 |
| s been successfully eve clear spans of 25m | 8500 | 9300 | 4402 | 19500 | 20300 | 8827 |
| of large tanks. | 9000 | 9800 | 4602 | 20000 | 20800 | 9027 |
| | 9500 | 10300 | 4973 | 20500 | 21300 | 9398 |
| es: | 10000 | 10800 | 4803 | 21000 | 21800 | 9598 |
| | 10500 | 11300 | 5174 | 21500 | 22300 | 9969 |
| ations up to 25m long struts* | 11000 | 11800 | 5374 | 22000 | 22800 | 9990 |
| time | 11500 | 12300 | 5745 | 22500 | 23300 | 10361 |
| costs with limited | 12000 | 12800 | 5766 | 23000 | 23800 | 10382 |
| ound ith the permanent works | 12500 | 13300 | 6137 | 23500 | 24300 | 10753 |
| iks to be placed directly | 13000 | 13800 | 5976 | 24000 | 24800 | 10562 |
| ions between | 13500 | 14300 | 6347 | 24500 | 25300 | 11324 |
| SIGHS DELWEEN | | | | | | |





Excavation Bracing Struts

Our range of medium to heavy duty bracing struts have been designed to be highly versatile. Compatible with our bracing systems, the bracing struts are used as intermediate supports allowing you to indefinitely extend the length of the excavation. With a range of end fixtures, the bracing struts can be used to prop permanent concrete structures such as diaphragm walls & capping beams. The struts can also be used as raking props for one-sided excavations.

| | : | |
|-------------------------------------|------------------------------|-----------|
| | Allowable Axial Load (kN) | (k N) |
| Trench Struts | 30kN | oad |
| Light Duty Mechanical Bracing Strut | 200kN | |
| JC40 Mechanical Bracing Strut | 300kN | e Axia |
| Standard Mechanical Bracing Strut | 400kN | /able |
| Heavy Duty Mechanical Bracing Strut | 600kN | Allowable |
| Super Bracing Strut | 1850kN | 4 |
| Super Bracing Strut-1000 | 3500kN | |

4000

3500

3000

2500

2000

1500

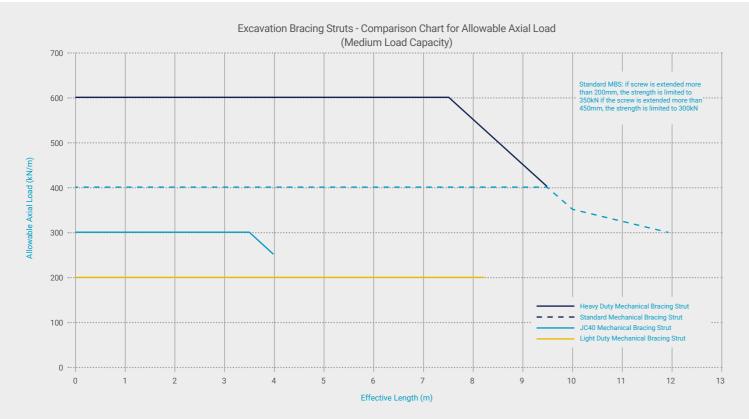
1000

500

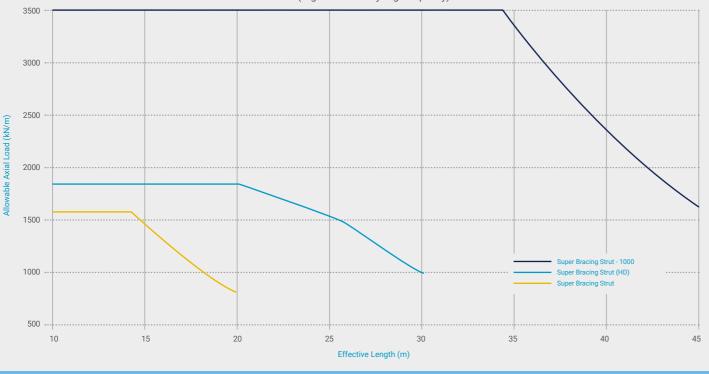


Excavation Bracing Struts

Our excavation bracing struts have the capacity to support low load shallow trench excavations to extremely high load large basement excavations. Use our load capacity comparison chart to ensure you find the right bracing system for your project.



Excavation Bracing Struts - Comparison Chart for Allowable Axial Loads (High to Extremely High Capacity)



The above charts are based on typical, simplified assumptions and do not include thermal effects, load eccentricity etc that may have an impact on the overall strength of a long strut. Struts should always be selected and verified by a competent person on a specific case by case basis.

Trench Struts

Our Trench Struts are designed for bracing timber waling and are ideally suited for small, shallow trench excavations.

Key Features:

- Safe working load of 30kN
 Available in lengths ranging
- from 300mm 1040mm Struts have bent corners to
- dig into the timber and stop movement.



Light Duty Mechanical Bracing Strut

A light duty strut, designed to be used in conjunction with our Shaftbrace & Multibrace systems.

Key Features:

Safe working load of 200kN Good spanning capability for



its weight Available in lengths ranging from 1890mm - 8190mm

JC40 Mechanical Bracing Strut

Designed to be used in conjunction with our Shaftbrace and Multibrace systems.

Key Features:

- Safe working load of 300kN
- Very strong for short span excavations
- Available in lengths ranging from 490mm - 3950mm





| Closed length (mm) | Open length (mm) | Weight per strut (kg) |
|-----------------------|---------------------|--------------------------|
| 300 | 450 | 4.95 |
| 450 | 710 | 7.25 |
| 680 | 1140 | 9.52 |
| 1040 | 1750 | 12.7 |

| External working | | Weight per strut |
|------------------|------|------------------|
| Min | Max | (kg) |
| 1890 | 2690 | 272 |
| 2390 | 3190 | 318 |
| 2890 | 3690 | 339 |
| 3390 | 4190 | 385 |
| 3890 | 4690 | 382 |
| 4390 | 5190 | 428 |
| 4890 | 5690 | 474 |
| 5390 | 6190 | 495 |
| 5890 | 6690 | 468 |
| 6390 | 7190 | 514 |
| 6890 | 7690 | 560 |
| 7390 | 8190 | 581 |

| External worki | External working range (mm) | | |
|----------------|-----------------------------|------|--|
| Min | Max | (kg) | |
| 490 | 710 | 61 | |
| 710 | 1150 | 76 | |
| 1110 | 1550 | 97 | |
| 1510 | 1950 | 116 | |
| 1910 | 2350 | 137 | |
| 2310 | 2750 | 156 | |
| 2710 | 3150 | 177 | |
| 3110 | 3550 | 196 | |
| 3510 | 3950 | 217 | |

Standard Mechanical Bracing Strut

Designed to be used in conjunction with our wide range of bracing systems, with a load capacity of 400kN.

Key Features:

- · Available in lengths ranging from 2290mm 12490mm
- Safe working load of 400kN
- Compatible with Shaftbrace, Multibrace & Super Shaftbrace

| | External worki | ng range (mm) | Weight per strut |
|---|----------------|---------------|------------------|
| | Min | Max | (kg) |
| | 2290 | 3490 | 374 |
| | 3040 | 4240 | 464 |
| | 3790 | 4890 | 521 |
| | 4540 | 5740 | 577 |
| | 5290 | 6490 | 667 |
| - | 6040 | 7240 | 724 |
| | 6790 | 7990 | 774 |
| | 7540 | 8740 | 837 |
| | 8290 | 9490 | 894 |
| | 9040 | 10240 | 984 |
| | 9790 | 10990 | 1040 |
| | 10540 | 11740 | 1097 |
| | 11290 | 12490 | 1163 |
| | | | |

Heavy Duty Mechanical Bracing Strut

A heavy duty strut, with a high load capacity of 600kN, it is designed to be used in conjuction with a wide range of our excavation bracing frames.

Key Features:

- Available in lengths ranging from 2290mm 8740mm
- Safe working load of 600kN
- Compatible with Shaftbrace, Multibrace & Super Shaftbrace

| External wor | External working range (mm) | | |
|--------------|-----------------------------|------|--|
| Min | Max | (kg) | |
| 2290 | 3490 | 442 | |
| 3040 | 4240 | 532 | |
| 3790 | 4990 | 589 | |
| 4540 | 5740 | 645 | |
| 5290 | 6490 | 735 | |
| 6040 | 7240 | 792 | |
| 6790 | 7990 | 815 | |
| 7540 | 8740 | 905 | |

Super Bracing Strut

A high load capacity strut, designed to be used in conjunction with our Super Shaftbrace and Supershaft Plus systems.

Key Features:

- · Available in lengths ranging from 2165mm 29800mm
- Safe working load of 1850kN

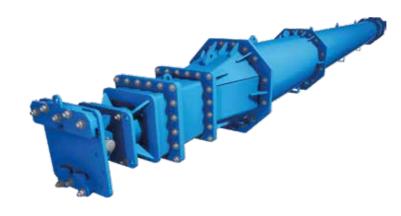


Super Bracing Strut-1000

An extremely high load capacity strut, designed to be used in conjunction with our Supershaft Plus bracing frame or concrete capping beams. All schemes are to be designed by a Mabey Hire Engineer.

Key Features:

- Available in lengths ranging from 4745mm 45445mm
- Safe working load of 3500kN
- Compatible with Supershaft Plus .
- · Typically used in large basement excavations



For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk

| Struts | Using | 400mm | Extensions |
|--------|-------|-------|------------|
|--------|-------|-------|------------|

s Struts Using 600mm Extensions

| External range | working (mm) | Weight per strut | External range | l working e (mm) | Weight per strut |
|-------------------|-----------------|---------------------|-------------------|---------------------|---------------------|
| Min | Max | (kg) | Min | Max | (kg) |
| 2165 | 2765 | 925 | 11600 | 12800 | 5030 |
| 3165 | 3765 | 1285 | 12600 | 13800 | 5330 |
| 4040 | 5640 | 1488 | 13600 | 14800 | 5950 |
| 5040 | 6640 | 1848 | 14600 | 15800 | 5580 |
| 6040 | 7640 | 2038 | 15600 | 16800 | 6200 |
| 7040 | 8640 | 2398 | 16600 | 17800 | 6500 |
| 8040 | 9640 | 2413 | 17600 | 18800 | 6455 |
| 9040 | 10640 | 2773 | 18600 | 19800 | 7075 |
| 10040 | 11640 | 2963 | 19600 | 20800 | 7375 |
| 11040 | 12640 | 3323 | 20600 | 21800 | 7995 |
| | | | 21600 | 22800 | 7955 |
| 12040 | 13640 | 3188 | 22600 | 23800 | 8575 |
| 13040 | 14640 | 3548 | 23600 | 24800 | 8875 |
| 14040 | 15640 | 3738 | 24600 | 25800 | 9495 |
| 15040 | 16640 | 4098 | 25600 | 26800 | 9455 |
| 16040 | 17640 | 4113 | 26600 | 27800 | 10075 |
| 17040 | 18640 | 4473 | 27600 | 28800 | 10045 |
| 18040 | 19640 | 4663 | 28600 | 29800 | 10665 |

Struts Using 600mm Extensions Struts Using 1067mm Extensions

| External working range (mm) | | Weight per strut | | working (mm) | Weight per strut |
|--------------------------------|-------|---------------------|----------------|-----------------|---------------------|
| Min | Max | (kg) | Min | Max | (kg) |
| 4745 | 5945 | 4591 | 6745 | 7945 | 6445 |
| | | | 7245 | 8445 | 6867 |
| 5745 | 6945 | 4891 | 8245 | 9445 | 7295 |
| 6745 | 7945 | 5511 | 9245 | 10445 | 8111 |
| | | | 10245 | 11445 | 8539 |
| 7745 | 8945 | 5471 | 11245 | 12445 | 9355 |
| 8745 | 9945 | 6091 | 12245 | 13445 | 9783 |
| | | | 13245 | 14445 | 10211 |
| 9745 | 10945 | 6391 | 14245 | 15445 | 10639 |
| 10745 | 11945 | 7011 | 15245 | 16445 | 11461 |
| 11745 | 10045 | 6641 | 16245 | 17445 | 10448 |
| 11745 | 12945 | 6641 | 17245 18260 | 18445 19460 | 11270 11692 |
| 12745 | 13945 | 7261 | 19260 | 20460 | 12514 |
| 10745 | 14045 | 7541 | 20260 | 20460 | 12514 |
| 13745 | 14945 | 7561 | 20200 | 21460 | 12930 |
| 14745 | 15945 | 7516 | 22260 | 23460 | 13792 |
| 15745 | 16945 | 8136 | 23260 | 24460 | 14608 |
| 15/45 | 10945 | 8130 | 24260 | 25460 | 15424 |
| 16745 | 17945 | 8436 | 25260 | 26460 | 15852 |
| 17745 | 18945 | 9056 | 26260 | 27460 | 16280 |
| 17745 | 10545 | 5030 | 27260 | 28460 | 17102 |
| 18745 | 19945 | 9016 | 28260 | 29460 | 16093 |
| 19745 | 20945 | 9636 | 28745 | 29945 | 16915 |
| | 20510 | ,,,,, | 29745 | 30945 | 17337 |
| 20745 | 21945 | 9936 | 30745 | 31945 | 18159 |
| 21745 | 22945 | 10558 | 31745 | 32945 | 18581 |
| | | | 32745 | 33945 | 19009 |
| 22745 | 23945 | 10516 | 33745 | 34945 | 19437 |
| 23745 | 24945 | 11136 | 34745 | 35945 | 20259 |
| | | | 35745 | 36945 | 20681 |
| 24745 | 25945 | 11106 | 36745 | 37945 | 21109 |
| 25745 | 26945 | 11726 | 37745 38745 | 38945 39945 | 21931 |
| 04745 | 07045 | 44404 | 38745 | 39945 40945 | 22353 21414 |
| 26745 | 27945 | 11686 | 40245 | 40945 | 21414 |
| 27745 | 28945 | 12306 | 40245 | 42445 | 22658 |
| 28745 | 29945 | 12606 | 42245 | 43445 | 23480 |
| 20/45 | 27743 | 12000 | 43245 | 44445 | 23902 |
| 29745 | 30945 | 13226 | 44245 | 45445 | 23540 |

ShoreSafe Excavation Safety Equipment

Our range of ShoreSafe equipment is designed to improve health and safety for personnel working in or around excavations. From edge protection to entry and egress systems our full Shoresafe range is compatible with our excavation support and bracing systems.



Excavation Edge Protection Barriers

Our edge protection is designed to be used around the perimeter of an excavation to act as a barrier and to protect workers within the excavation from any falling debris.

Universal Edge Protection Barriers

We are the first temporary works specialist to meet and exceed BS EN 13374:2013 Class A & Class B - the Standards for Temporary Edge Protection This means that our Universal barriers can prevent large pieces of debris falling through it and are able to resist a dynamic force large enough to stop a person who is falling, sliding or rolling down a slope of up to 30°.

One product for all excavation projects - fully compatible with our range of drag, trench & manhole boxes and our trench sheets & sheet piles.

Key Features:

- · Independently tested (Lloyds British test house) to meet the most stringent standards for temporary edge protection
- Suitable for use where the ground slopes up to a maximum of 30° Integrated kickboard prevents the risk of falling debris
- Lock off system on clamps for maximum stability
- Designed to be offset so that it is clear of any trench box lifting points, so the lifting chains can be safely attached without removing the edge protection
- Compatible with our Ladder Access Platforms



| Panel height (mm) | 1066 |
|-------------------|----------|
| Min length (mm) | 655 |
| Max length (mm) | 2900 |
| Weight (kg) | 9.5-21.5 |

MabeyGuard & Sheetguard **Edge Protection Barriers**

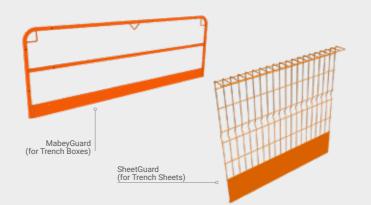
Mabeyguard is compatible with our range of drag, trench and manhole boxes. Available in lengths from 1.5m - 4.4m.

SheetGuard is compatible with our range of trench sheets & sheet piles. It has an adjustable barrier stop allowing for the height of the barriers to be set at varying heights.

Both barriers can be used as a stand alone or in conjunction with our Ladder Access Platforms

Key Features:

- · Kickboards to protect workers against falling debris
- · Lightweight panels that are man-handleable



| | MabeyGuard | SheetGuard |
|-------------------|------------|------------|
| Panel height (mm) | 1000-1013 | 1125 |
| Min length (mm) | 1542 | 1200 |
| Max length (mm) | 4416 | 2600 |
| Weight (kg) | 22-48.1 | Nov-24 |

Excavation Fall Arrest & Rescue System

Our Excavation Fall Arrest & Rescue System provides 360° fall protection and rescue capability for construction operatives working within excavations. The system includes a davit arm, HRA (Fall Arrest Block with Rescue Mechanism) and a davit clamp.

Kev Features:

- Can carry its full load safely at any angle (360°)
- Compatible with all our trench sheets, trench boxes and edge protection systems
- · Can be installed manually or mechanically
- Additional fall arrest attachment on the arm provides fall protection for the HRA operator during rescue operations
- Thoroughly tested in accordance with EN 795, EN 361 & EN 360

Double Point Harness

The Double Point Harness is a comfortable, easy-to-adjust fall arrest harness with front and rear D-ring attachment points. It's a simple and effective fall arrest harness for total safety compliance.

Key Features:

- · Lightweight carry bag for easy transportation
- Flexible materials allowing easy rolling/unrolling
- Multiple strong handles for secure manoeuvrability
- · Comes with lifting straps for vertical and horizontal hauling

SLIX100 Stretcher **Kit**

The SLIX100 Stretcher Kit is a robust, compact and lightweight kit designed for fast deployment across various terrains for multi casualty situations, such as floors and narrow corridors to embankments and open grounds.

Key Features:

- · Allows rapid, efficient transport of casualties in both emergency sitations and routine medical transfers
- Flexible, smooth material allows easy sliding
- · Can be rolled either width ways or lengthways to facilitate transport

For further information on any of groundworks systems please refer to our website at mabeyhire.co.uk







Double Point Harness

| Size | M-XXL, 3-4XL |
|------------------------|----------------------------------|
| Weight (kg) | 1.35 |
| SWL (kg) | 140 |
| Breaking Strength (kN) | 25 |
| Material | Polyester Webbing Steel Hardware |

SLIX100 Stretcher Kit

| Weight (kg) | 6.6 |
|---------------------------|-----|
| Length (cm) | 230 |
| Width (cm) | 92 |
| User Weight (kg) | 400 |
| Horizontal Lifting Points | 4 |
| Vertical Lifting Points | 4 |
| Carry Points | 9 |





We also offer our Gas Monitors: the next level of protection.

Ladder Access Platforms

Our cantilevered ladder access platforms ensure safe access and egress onto and from a pole or staircase ladder. With specific versions designed for use with either our trench boxes or our trench sheets, we have everything covered, whatever your project.

Our Ladder Access Platform incorporates many features to make it our most flexible and versatile platform yet.

Key Features:

 Designed in accordance with BS EN 13374.2013 Class A

Removable gate can be used at either end of the platform & can be

either left or right handed.

Ladder attachment

pole can be secured at either side

Frame can be adjusted vertically or horizontally to suit braced excavations

| | Box ladder access platforms | Sheet ladder access platforms |
|-------------|-----------------------------|-------------------------------|
| Height (mm) | 1170-1300 | 1040-1300 |
| Width (mm) | 850-1100 | 860-1100 |
| Depth (mm) | 850 | 1330-1490 |
| Weight (kg) | 110 | 170.5-226 |

Foldable platform for easy storage &

transportation

Quick adjusting legs with an increased adjustment range

Other Access Equipment

Ladders

Our steel and timber* ladders are available in a variety of lengths from 3m to 8m and can accommodate excavation depths of 1.5m to 6.5m.

*Available for sale only

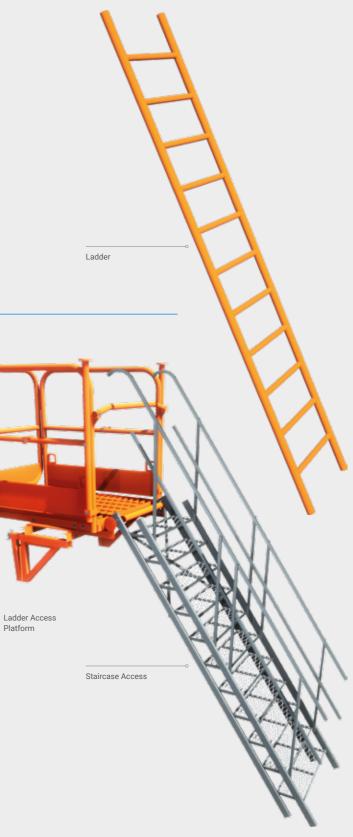
Staircase Access

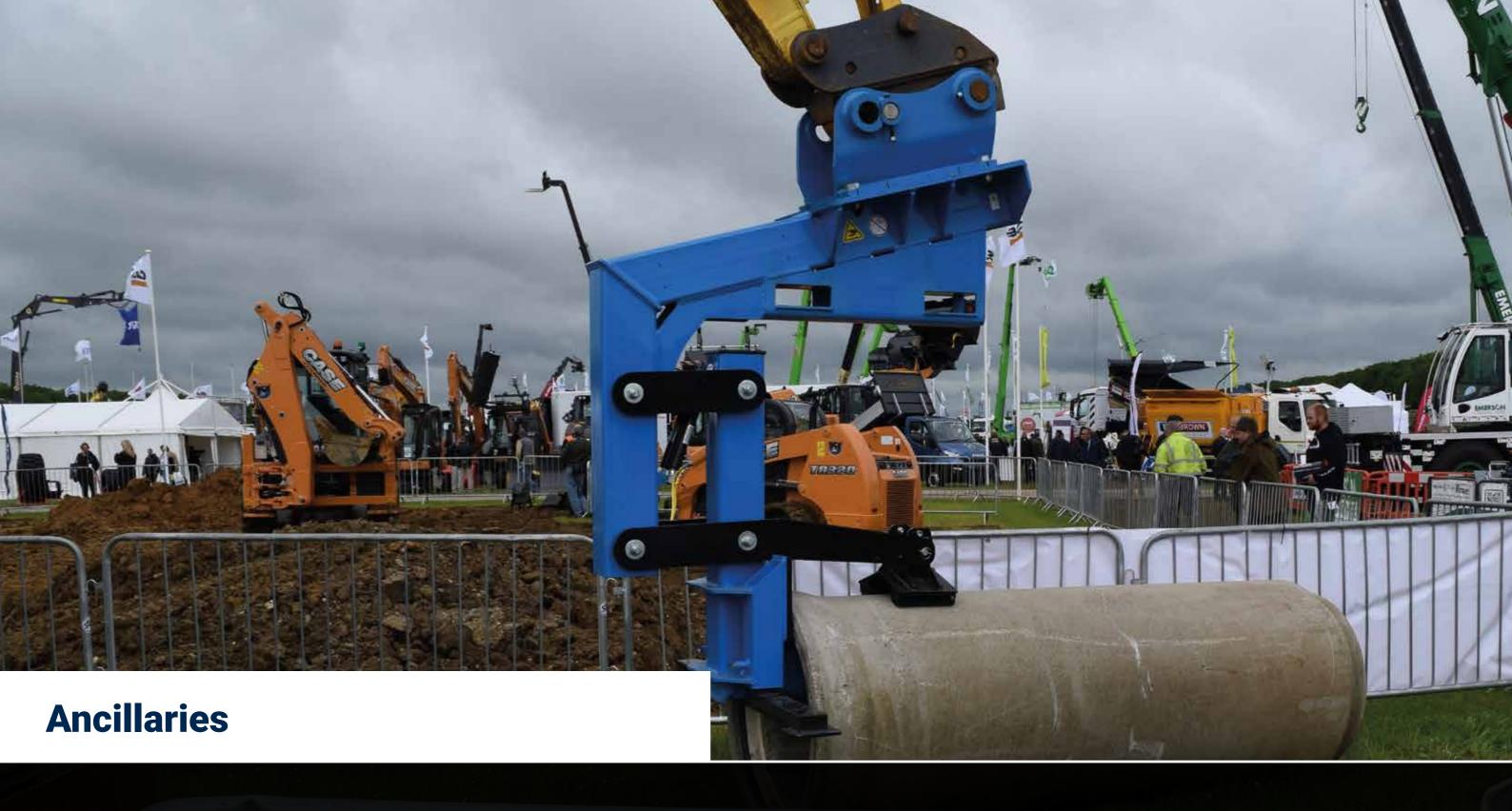
Our steel staircase provides a safer alternative to ladder access as it has a hand rail on both sides. It is available in a variety of lengths, and can be installed at variable gradients dependent on the depth of the excavation.

Key Features:

- The staircase is foldable for ease of storage and transportation
- Double handrail automatically adjusts to the correct height







Our extensive range of groundworks equipment is complemented by our ancillary products, offering our customers a full solution for their site requirements.

Manhole Lifter

Our Manhole Lifter is designed to mechanically lift and transport manhole rings. It attaches to the excavator and is capable of lifting the ring securely, removing the need for the workers to enter the excavation by removing the need for manual sling points.

Key Features:

- Suitable for manhole rings from 900mm to 1800mm diameter
- Safe working load of up to 2500kg
- All mechanically operated, no additional hydraulics required
- Only requires one person to operate (Excavator Operator)
- Available for hire or sale



| Internal manhol | e diameter (mm) | Manhole ring depth (mm) | | Weight of lifter (kg) | Safe working load (kg) |
|-----------------|-----------------|-------------------------|------|--------------------------|---------------------------|
| Min | Max | Min | Max | (kg) | (kg) [°] |
| 900 | 1800 | 250 | 1800 | 92 | 2500 |

Manhole Safety Platform

Designed to be placed on top of a precast concrete manhole ring, the Mabey Hire Manhole Safety Platform provides a safe and secure area for operatives to work from whilst installing manhole equipment. The platform can also be used if the manhole ring is fitted with a cover slab.

Key Features:

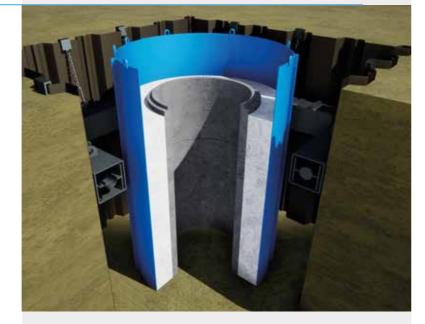
- Added protection against accidents on site
- Available in multiple sizes covering manhole ring diameters from 1050mm to 2100mm
- Anti Slip coating to the base provides added safety
- · All handrail sections can act as a gate, allowing access at any point around the platform

Manhole Shutters

Our Manhole Shutters are ideal to simplify the formation of circular formwork to form a uniform thickness concrete surround to pre-cast concrete manhole rings.

Key Features:

- · Available in two heights 900mm & 1800mm
- · 3 panel widths allow for manhole nominal diameters from 675mm to 3000mm
- · Simple pin and wedge system ensures rapid assembly.
- Available for hire or sale.



| Height (mm) | Width (mm) | Weight (kg) |
|-------------|------------|-------------|
| 900 | 250 | 14 |
| 900 | 620 | 19 |
| 900 | 1530 | 33 |
| 1800 | 250 | 27 |
| 1800 | 620 | 36 |
| 1800 | 1530 | 66 |

Pipe Lifter

Our Pipe Lifter is a non-hydraulic excavator attachment for the safe lifting and laying of concrete pipes. Using the pipe lifter eliminates any manual handling of pipes and avoids the need for groundworkers in the trench during pipe installation

Key Features:

- Allows site operatives to offload pipes without manual intervention
- Can be operated by one person
- Can be attached to most excavators using quick hitch coupling
- It has a 90° leg rotation which makes it ideal when accessing narrow excavations
- For 0.3-1.2m diameter pipes
- · Lifting capacity up to 4 tonnes
- Available pin diameter sizes: 65, 80, 90 & 100

| Internal | manh |
|----------|------|
| Min | |
| 300 | |





| le | e diameter (mm) Max | Max. pipe length (mm) | Lifting capacity (kg) | Weight of lifter (kg) |
|----|------------------------|--------------------------|--------------------------|--------------------------|
| | 1200 | 2600 | 600-4000 | 990-1075 |
| | | | | |

Culvert Puller

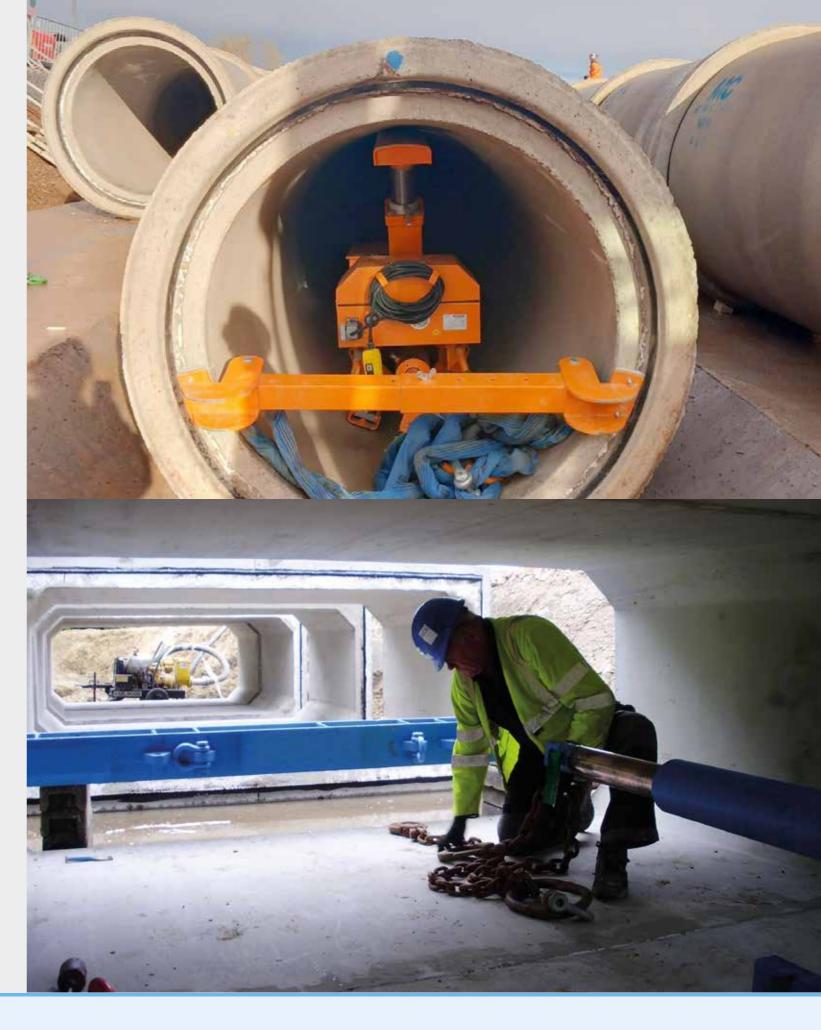
Our Culvert Pullers are designed for the safe installation of pre-cast square, rectangular or circular culvert sections.

Using traditional hydraulic systems, or our battery powered system, the pullers pull the culverts into position and are powerful enough to work with the sealing agent to create a watertight bond between the culverts.

- 10t pullers can be twinned to increase their collective pull capacity of 20 tonnes
- Can fit a variety of shapes & sizes of pre-cast concrete culverts
- A range of pulling beams are available to suit different culvert widths
- 16t pullers come with a remote control with 10m cable

| Internal culvert height (mm) | | Internal culvert width (mm) | |
|------------------------------|------|-----------------------------|----------------|
| Min | Max | Min | Max |
| 2290 | 3490 | 2290 | 3490 |
| 800* | 3650 | 1000 | 6500 |
| | 2290 | 2290 3490 | 2290 3490 2290 |





Monitoring: keeping sites safer with real-time data

With the advances in digital technology we can help keep sites safer with the use of real-time data.

Our industry-leading range of monitoring solutions provide you with vital, real-time data and insight about structural movement and environmental factors that can impact your project.

When working on large scale excavations, we know safety is the number one priority. LIVEpin is a wireless solution designed to work exclusively with our Super Bracing Struts to measure axial load & temperature. It provides constant, accurate measurements and alerts you to any changes or issues that may require immediate attention, giving you peace of mind your project is secure.

There are also numerous environmental factors that can impact the conditions on site or surrounding area, e.g. noise, dust, vibration, rainfall etc. Enviroguard continuously measures all of these factors plus more, analysing the site conditions to ensure compliance to Section 61 of the Control of Pollution Act 1974.

To talk to us about a monitoring solution for your project, call 0330 191 5594 or email us at action@mabeyhire.co.uk.

<<



the full monitoring solution, from start to finish.

Step 3

Data configuration

reporting software, Mabey LIVEsite is pre-configured for each project based on a clear understanding of client needs with built in trigger levels to alert users to any breaches.

Step 1

System planning & design

Early engagement with our clients ensures that our expert engineers design a tailored monitoring solution to all projects.

Step 2

Installation & configuration

Our team will install and ensure accurate configuration of all monitoring equipment on site.

Selec.

>>

10/11/2018

17:10:4

Our unique web based

Step 5 Reporting

Templates are set up within the LIVEsite system to enable quick and easy reporting.

Step 4

Data visualisation

Clients are able to view accurate, real-time data that is easy to interpret through the use of graphs, schematics and 3D modelling.



Engineering the future

Here at Mabey Hire, we are committed to driving our industry forward. Whether through using the latest technologies or through learning and development, we are constantly looking for ways to improve safety and efficiency for our customers.

With a dedicated digital engineering team embedded in our business, we use the latest technology to help our customers design winning bids, reduce the costs of construction, speed up delivery, improve safety and reduce the full-life cost of infrastructure.

We are extremely passionate about raising standards in the temporary works industry, that's why we have invested in our ICE accredited training programme and developed our STEM Education Programme.

BIM (Building Information Modelling)

Our early adoption of Revit 3D software in our scheme designs, enabled us to further help our clients to win and deliver projects. We have the capability/processes to work to BIM level 2 standards.



Learning & Development

With our in-house ICE accredited training programme we are committed to supporting the development of our engineers to raise standards within the temporary works industry.

The ICE has approved our structured training agreement and many of our engineering team are either Fellows of the ICE, Chartered Engineers or are working towards professional qualifications.



Short bespoke

UC Sections

details TBC

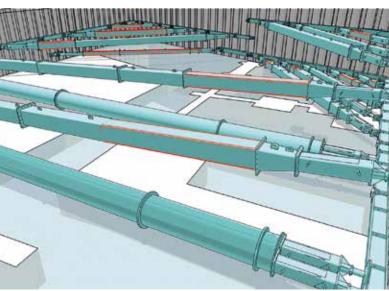
24

LOD

Immersive Technology

Developed by our in-house engineers, EVE uses immersive technology to create an intuitive 3D design for your construction project, incorporating all aspects of temporary works.

Rendering a fully explorable visualisation of your project, EVE allows users to see the full project before construction work begins.



STEM (Science, Technology, **Engineering & Mathematics**)

We take our responsibility for encouraging the next generation of engineers seriously. That's why we have built the STEM Education programme, using LEGO® to inspire children to consider a career in engineering, delivered by our own STEM Ambassadors, enabling a new generation of engineers to take our industry forward.





TAKING **RE:**SPONSIBLE ACTION

ESG

Our activities help shape the world we live in and leave a lasting impact. That's why we're committed to protecting the planet, caring for our people and communities, and being a responsible business.

ESG stands for Environmental, Social and Governance and our strategy sets out how we're taking responsibility for protecting the planet, people and communities to achieve a sustainable future, from the way we behave and operate as a business, to the actions we all take every day.

Discover our full ESG strategy at: mabeyhire.co.uk/esg



PLANET

Taking action today to protect our planet's future

- Net Zero by 2035
- Enhancing biodiversity
- · Reducing waste to landfill
- Paper-lite business

13 ALTON

CO

 \bigcirc

CARING FOR PEOPLE & COMMUNITY

RE:AFFIRMING OUR COMMITMENTS

Supporting a fair and inclusive society

- Providing an inclusive workplace with equal opportunities
- Engaging with the communities we work in
- Early career engagement
- Supporting our people



BEING A RESPONSIBLE BUSINESS

Doing the right thing, always

- Fair and rewarding renumeration
- A compliant and responsible business
- Responsible procurement and supply chain management
- Transparent reporting

O



Mabey Hire Near You

SCOTLAND

GLASGOW Woodhead Rd, Muirhead, Chryston, Glasgow, G69 9JD

0141 779 3535 scotland mabevhire.co.ul

ABERDEEN Ellon Commercial Park, Balmacassie, Ellon, AB41 9RD

INVERNESS 41 Lotland Street, Inverness, IV1 1ST

NORTH

nabevhire co

DURHAM Parkgate, Hetton Lyons Ind Est, Houghton-Le-Spring, DH5 0RH DEWSBURY

1-5 Railway Street, Scout Hill, Ravensthorpe, WF13 3EJ

GARSWOOD 198 Gibbons Road, Garswood, Nr Wigan, Lancashire, WN4 0YA

01902 404512 central@mabeyhire.co.ul CENTRAL

NOTTINGHAM Oakwood Grange, Robinettes Lane Cossall, NG16 2RX

BILSTON Stag Ind Est, Oxford Street,

HATFIELD

STROOD

Bilston, West Mids, WV14 7HZ

WELLINGBOROUGH 15 Bradfield Close, Finedon Road Ind Est, Wellingborough, NN8 4RQ

SOUTH EAST

BURY ST EDMUNDS Mercers Rd, Compiegne Way Bus Pk, Bury St Edmunds, IP32 7HX

ROMSEY

Belbins Business Pk, Cupernham Lane, Romsey, SO51 7JF

SOUTH WEST

CARDIFF Gulf Works Industrial Estate, Penarth Road, Cardiff,CF11 8TT

NEWTON ABBOT

Fairfax Road, Heathfield Ind Est, Newton Abbot, Devon, TQ12 6UD

01707 267171 southeast@mabeyhire.co.uk

Dennis Works, Travellers Lane, Welham Green, Hatfield, AL9 7HN

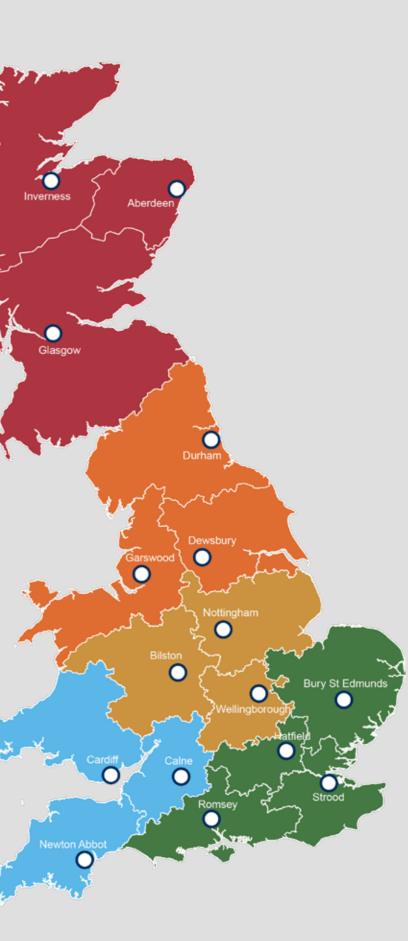
Commissioners Road, Strood,

Rochester, Kent, ME2 4EQ

01249 819064 southwest@mabeyhire.co.ul

CALNE Harris Road, Porte Marsh Ind Est,

Calne, Wiltshire, SN11 9PT





0330 191 3455 action@mabeyhire.co.uk

