

**YOUR  
21<sup>ST</sup> CENTURY  
SHEET PILING  
PARTNER**

ANCHORS  
FREE PILING  
STEEL WEEP HOLES  
RETAINING PILES  
VINYL PILING  
CORNER PILES  
COFFERDAMS  
T BASEMENTS  
FOUNDATIONS  
ATORY PILING  
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WE ARE MORE  
THAN JUST A  
SHEET PILING  
CONTRACTOR:  
WE ARE YOUR  
PARTNER OF  
CHOICE.

## A LITTLE ABOUT US...

**“As one of the UK’s leading driven steel piling contractors, Sheet Piling (UK) Ltd has built its reputation on solid foundations.”**

An unswerving commitment to quality is backed by a dedication to providing customers with innovative and strategically sound solutions that are as high impact on the drawing board as they are on the ground.

As a specialist in our field, founded in the mid 1990s but with collective industry experience stretching back decades, we understand the needs of the contractor, wherever their project may be and whatever the on-site conditions.

We have acquired our standing in the industry on the basis of comprehension, flexibility, innovation and expert advice:

in other words, we offer our clients a holistic package, which goes way beyond their expectations.

Our considered installation solutions and approach to business enable us to continue to extend our influence within our sector, winning contracts on the basis of recommendation and not just price. Whatever the client’s remit, problem or challenge, if it involves sheet piling, we can engineer an approach to help fulfil or tackle it. We are more than just a sheet piling contractor: we are the partner of choice.

We are Sheet Piling (UK) Ltd.

## BUT MORE ABOUT YOU...

As a sheet pile specialist, we know our business inside out, giving us time to place more emphasis on the customer and the changing market in which they operate, in order to deliver leading-edge solutions.

Through close liaison with clients, developers and principal contractors, we are able to help develop successful projects, built on reliable and relevant methodologies, whether these relate to temporary installations or permanent ones. We can suggest alternatives when it appears to us that a project would benefit from a different approach and we can save the client money, hassle and time, by offering an expert view on how a job could be tackled in a more appropriate manner.

We continually offer clients a wide selection of highly competitive and

weight/modulus efficient sheet pile sections, with superior driveability characteristics and high yield steel quality. Additionally, we can have our sheet piles, and our construction teams, wherever you want them, whenever you want them, thanks to having true nationwide coverage and regionally-based teams.

We appreciate the legal and environmental arenas in which we operate and make our health and safety practices, and our environmental policies, aspects of key concern.

We are more than just a sheet piling contractor: we are experienced extensions of your team or crew, steering an organisation within which excellence is a word to embrace and relish.





## ROCK SOLID FOUNDATIONS

Sheet Piling (UK) Limited has the capability of handling projects ranging in value from £30,000 to £5 million and maintains its excellent levels of performance with the assistance of a network of top quality suppliers, with whom it has built rapport, trust and understanding over time.

The company is the sole UK agent for the importation of Nippon Steel Piles (NSP) and Tokyo Steel Piles (TSP) - both hot rolled sheet pile sections - and is constantly monitoring global markets for new products and options that could deliver a solution to suit a particular brief.

These factors combine to create a major benefit for our customers, as

we continually maintain a high stock level of around 5,000 tonnes of new piles, all of which are supplied with mill certification. In addition we hold stocks of used sheet piles. The advantage of this stock-on-demand service for our customers is that there is no delay in starting a project, as piles can instantly be purchased or hired and en route to a site within hours, drastically reducing the lead-in time for even the largest of sheet piling projects.

**“The company is the sole UK agent for the importation of Nippon Steel Piles and Tokyo Steel Piles.”**

Another advantage relates to quoting for projects, which can be almost instantaneous, without the need to wait for prices to be forwarded by suppliers either in the UK or overseas. It is rare to find such a large amount of ‘instant stock’ within our industry and our clients appreciate the opportunity to tap into a flexible service, which is responsive to changing situations and always on hand for when an unexpected or emergency need arises.

**“Our ‘fleet’ includes state-of-the-art Silent Vibration-free Hydraulic pile pressing equipment and Telescopic Leader Rigs.”**

Scan this QR Code with your smartphone to watch a video of Silent Vibration-Free sheet pile installation.



## EQUIPPED TO PERFORM

Sheet Piling (UK) Limited has invested in what we could describe as our ‘hardware’, to ensure that we have a comprehensive range of specialist, modern piling equipment at our fingertips.

Our ‘fleet’ includes state-of-the-art Silent Vibration-free Hydraulic pile pressing equipment and Telescopic Leader Rigs equipped with the very latest variable moment vibration hammers and augering equipment. Add to this conventional piling hammers and a suite of other solution-focused tools and machinery and we are equipped to perform at the highest level and on the most sensitive of projects.

Furthermore, we support our clients by

offering a full, in-house design service, delivered by professional and qualified engineers. The design team are focused on developing cost-effective installation solutions and working with the client, in order to optimise the efficiency of the materials used on site. At times, this can mean substituting sheet piles for other traditional solutions considered by the client at the planning stage - which frequently results in the client saving money.

Should the client wish to use their own designers, we are happy to work in partnership on that basis, taking the plans provided by consultants and contractors employed by the client and delivering our input to the project as and when required.





# SAFETY FIRST

Our overriding concern, on all projects, is that of health and safety which influences our thinking and informs our practices at every stage. All of our employees have trade specific CPC/SCS skills cards and all site supervisors hold the relevant Federation of Piling Specialists (FPS) accredited certification. All management-level personnel have been trained to IOSH safety standards and hold Appointed Persons' Skills Cards. Sheet Piling (UK) Limited is also accredited to its industry's CHAS scheme.

As a company, we continuously and proactively assess all areas, to identify hazards and risks associated with our work. Employees receive thorough training and instruction and are fully aware of the need to be compliant, safe and environmentally aware. Our commitment to evaluation, monitoring processes and reporting back on on-site installations and methodologies is all part of our drive towards ever-higher levels of health and safety performance and optimum efficiency across the business.

Safety is not an add-on to our business, but an integral part of its day-to-day operation, woven into our ethics, our practices and our strategic planning. Putting a sheet piling operation in the hands of Sheet Piling (UK) Limited is a safe and sound decision for clients wanting both peace of mind and total conformity when it comes to health and safety.



# ENVIRONMENTAL CONCERN

Nature surrounds us wherever we carry out our sheet piling operations and our teams are trained to be continually mindful of the need to respect natural environments, habitats and the wider environment, whether this is in a residential area, a packed town centre, or on a quayside.

Our projects comply with the Environmental Protection Act 1990 and all other domestic legislation protecting both natural resources and communities. Projects commence with an audit of possible impacts and the establishment of control measures to prevent or

minimise these impacts. Noise pollution, vibration, air pollution and waste products are put under the microscope at the planning stage, so all projects are carried out with due consideration for the environment.

Where a more environmentally-friendly technique exists, we will advise the client of this option, whether designing the project in house, or working to other plans. Our advice may revolve around the use of temporary, removable sheet piles that can be re-used on completion of the project, the use of vinyl and composite piles that can help reduce

the carbon footprint of a scheme, or spoil minimisation on Brownfield sites where contaminated soil may present a problem.

In a packed commercial centre, or quiet rural location, it might well involve the use of silent, vibration-free piling, thus removing noise pollution from the scenario and minimising the impacts on the project's immediate community and hinterland.

Rest assured, your concern for the environment is also our concern.



# QUALITY ASSURANCE

Delivering a quality service and product to all clients is a key aspect of our company's principals. Sheet Piling (UK) Limited offers an in-house 'Quality Assurance' system with procedures and policies specifically tailored to individual clients needs on a project-by-project basis.

Be it a specific 'Inspection and Testing Plan', continued monitoring and checking during installation using state-of-the-art calibrated equipment or 'customer feedback' upon completion, you can be assured that employing Sheet Piling (UK) Limited ensures quality comes as standard at all stages of the project.

**“Delivering a quality service and product to all clients is a key aspect of our company's principals.”**



# OUR PROJECTS

Sheet Piling (UK) Limited delivers innovative solutions in a wide range of settings, including industrial, commercial and residential sites, rail and road transport locations, ports and harbours, airfields, pipelines and water supply plants.

**“We are always poised and ready to handle any type of job that involves sheet piling.”**

The sector for which we are carrying out a project is largely irrelevant, as our core skills and products replicate their functionality and performance across all divisions of the commercial, residential and public works world, however you wish to categorise them.

As a specialist sheet piling company, our work revolves around certain key construction features: steel intensive and permanent basements; permanent retaining walls; temporary sheet piling; conventional and marine sheet piling; steel bearing pile foundations, vinyl and composite sheet piling, and temporary and permanent anchors.

Our methodologies include the use of techniques such as silent, vibration-free piling and telescopic leader rigs, as well as conventional driving equipment.

Using our skills, experience and specialist technology, as well as our ready-to-use stock of over 5,000 tonnes of sheet piles at our depots at any one time, we are always poised and ready to handle any type of job that involves sheet piling and the use of sheet piles within components of the construction brief.



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# PERMANENT STEEL INTENSIVE SHEET PILE BASEMENTS

Sheet Piling (UK) Limited is the UK's leading expert in the design and construction of steel intensive basements. This innovative solution, in which sheet piles are used as the permanent retaining wall, can be applied to scenarios such as underground car parks, pumping stations, storage tanks and other instances where it is necessary to have a retaining structure.

Our expertise in this area enables us to offer informed design advice to our clients, producing value engineering solutions that can deliver significant cost savings when compared to the cost of traditional concrete basement constructions or secant and contiguous piled walls.

Using our permanent axially loaded sheet piles, we can eliminate the need for any temporary earthworks support, perimeter piles and pile caps. At the same time, we can maximise the

basement's footprint, ensuring additional space for the end-user, which can mean additional income in cases such as car parks. There is also a reduced volume of excavated soil, which results in lower disposal costs, and clients can take satisfaction from the fact that they are using 100% environmentally-friendly, recycled steel.

For Steel Intensive Basements, we have channelled our knowledge and experience and used it to develop a range of systems that ensure a 100% watertight basement construction is achieved. The solutions include non-structural welding to the exposed sheet pile interlocks and watertight wall/basement slab connections. The resulting watertight construction always meets the standards of BS8102:Pt2:2009, which is the 'Code of Practice for Protection of Structures Against Water From The Ground'.

All of our welding is carried out to a standard that satisfies Lloyd's accredited welding procedures, whilst the quality of our works also meets welder qualifications' acceptance criteria and testing regimes. To ensure our clients have total peace of mind, we provide a full insurance-backed warranty for our permanent basement solutions, which covers both design and waterproofing.

From large commercial developments such as Donegal Quay in Belfast and Lapps Quay in Cork, to shopping centres such as the Stratford Olympic in London and the Eagle Shopping Centre in Derby, we have a portfolio of high profile work to share with prospective clients, proving that we are the number one name when it comes to permanent steel intensive sheet pile basements.



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1. Permanent Steel Intensive Sheet Pile Basements.
2. Permanent Sheet Pile Retaining Walls.
3. Temporary Sheet Piling.
4. Conventional and Marine Sheet Piling.
5. Steel Bearing Pile Foundations.
6. Vinyl and Composite Sheet Piles.
7. Ground Anchors.
8. Restricted Access Works.





# PERMANENT RETAINING WALLS

A wide variety of schemes and applications have benefited from Sheet Piling (UK) Limited's supply and installation of sheet piles for the formation of a permanent retaining wall. For some of these, we have also contributed the design work, using our own in-house design facility.

Permanent retaining walls formed from sheet piles are a solution of choice in cases where there is insufficient space in which to install complex temporary works necessary for alternative retaining solutions, but also where the cost and project benefits of using steel piles make them too attractive a proposition to refuse. Once the sheet piles have been installed, earthworks can begin immediately, as there is no

curing period, as would be the case with the alternative secant and contiguous pile walls. Reducing the construction programme, by using a sheet pile solution, brings valuable cost savings.

Permanent sheet retaining walls can accommodate a design life of up to 120 years and can be shot blasted and painted, to provide an aesthetically acceptable finish, as well as enhanced pile section design life. Alternatively, non-structural cladding solutions can be constructed in front of the wall, to provide the finish that the client seeks.

Working in the field of rail and road infrastructure, we have consistently designed schemes to Highway Agency or Network Rail design standards, bearing

**“We have brought our expertise to bear on some of the UK’s biggest schemes.”**

in mind requirements such as surcharge loading and design life. We also have extensive experience with applications that include retail and commercial service yards, flood defence walls and axially loaded bridge abutments. Design specifications here include the relevant Approval in Principal or Form B documentation, together with independent checking, where applicable.

Whether it has been M25 widening, supermarket construction projects, or work on the Manchester Metro Link, we have brought our expertise to bear on some of the UK's biggest schemes and delivered total client satisfaction at project end.

# TEMPORARY SHEET PILING

Sheet Piling (UK) Limited has a proven track record in the design, supply, installation and extraction of sheet piles to form temporary cofferdams and retaining walls for underground tanks, access jetties, drive and reception pits and other scenarios in which temporary earthwork support is essential for ground stability.

We are ideally placed to meet any immediate or emergency need for temporary sheet piling, having a vast number of predominantly Larssen U type temporary steel piles, in a wide variety of lengths and section sizes, in stock at any one time.

As well as providing sheet piles for temporary works, we can provide

ancillaries, in the form of ground anchors, waling beams, steelwork bracing frames, tie-rods and dead-man anchorages. We can overcome durability issues and reduce pile damage thanks to our range of solutions and ensure that safe and stable excavations take place, whether the construction work supports a motorway widening scheme, or is centred around one of the UK's major power stations.

Add to this our advantage of having an owned fleet of specialist equipment, including telescopic leader rigs with high power vibratory hammers, silent and vibration-free pile processing equipment and conventional piling methods, and one call to Sheet Piling (UK) Limited can access a full suite of services.

**“We are ideally placed to meet any immediate or emergency need for temporary sheet piling”**

This suite also includes design and our inhouse design team can work closely with clients and contractors to ensure that any interface between temporary and permanent works is addressed at the design stage.

All of our temporary solutions are available on a hire or sale-and-buy-back basis, according to the project needs and budget constraints of the individual client. All extracted piles are reused, making them an environmentally-friendly solution.

Scan this QR Code with your smartphone to watch a video of Temporary Steel Sheet Pile Installation.





# CONVENTIONAL AND MARINE SHEET PILING

We can boast having significant experience in the design and installation of all types of conventional and marine installations, including dock wall stabilisation, quay works, circular cofferdams, jetties, slipways and mooring dolphins. We understand the specific challenges of working in different environments, whether these be tidal, inter-tidal, or land-based zones behind docks and quays, and work closely with clients and contractors who include port authorities.

**“Our assessments ensure delivery of the optimum value engineering scheme.”**

This experience enables us to take on any conventional installation project, whether it be on land or in water, using our wide range of conventional piling

equipment. This includes hydraulic impact hammers and vibration hammers, suitable for both a tubular and a sheet pile installation, together with piling gates and trestles.

Other installations may require different solutions and Sheet Piling (UK) Limited can offer temporary and permanent ground anchors, tie rods and anchorage works, H bearing steel piles, reinforced concrete capping beams, tubular piling and clutch bar and general civil works techniques and equipment.

Our methodologies enable us to install long, high modulus piles where needed and work in conditions where working platforms cannot be constructed on the pile line. We can drive piles into the most difficult of ground or rock and ensure that the piles maintain verticality and alignment, in whatever environment they are driven. By using pile headers,

we can also reduce the need to work at height.

We can offer feasibility assessments, based upon the expertise of our capable and confident management and on-site teams, as well as detailed method statements and risk assessments to support any scheme. Our assessments ensure delivery of the optimum value engineering scheme – something that our clients appreciate and find invaluable.

Our teams have worked on schemes such as the dock wall stabilisation in Hendon Dock, Sunderland, permanent cofferdam and bearing piles for the Millennium Bridge, Stockton-on-Tees and tubular pile gantries on the A64 at Hoppgrove, York. From Portishead to the Piethorne STW, Sheet Piling (UK) Limited has made its mark and bolstered its reputation for excellence in its field.

# STEEL BEARING PILE FOUNDATIONS

Steel bearing piles are an ideal pile solution when foundations are required for complex structures or difficult ground conditions exist.

Sheet Piling (UK) Limited has extensive experience in the design and installation of either Universal Bearing Piles (UBP) or alternative tubular piles.

These are ideally suited to situations which require hard driving through difficult ground conditions, such as silty, fine, water bearing sands containing cobbles and boulders or dense sands/ glacial till. They are particularly viable and offer a cost effective solution when a site has foundations of rock or a similar hard strata.

Universal Bearing Piles are traditionally installed as bridge abutment foundations on heavy industrial and port developments, or within any

construction application where a high capacity driven pile solutions is acceptable.

Bearing piles offer an extremely environmentally responsible solution since they are a low displacement pile, which generates no rising of spoils. They can also be extracted and reused upon decommissioning of the structure. UBP's are generally installed using a vibratory hammer with a final drive to level/set using a hydraulic impact hammer.

Once installed, the bearing piles can be tested using 'non-destructive' pile testing methods to verify design axial capacity resistance has been achieved. The benefit of this is that it allows immediate commencement of remaining foundation/substructure works.

Sheet Piling (UK) Ltd is able to offer Universal Bearing Piles in all standard

sections and weights to BS4-1:2005 and in Grade S355-JR to BS-EN-10025:Pt2:2004.

**“Bearing piles offer an extremely environmentally responsible solution since they are a low displacement pile, which generates no rising of spoils.”**





# VINYL AND COMPOSITE SHEET PILING

As the UK's largest supplier and installer of vinyl and composite sheet piles, Sheet Piling (UK) Limited knows a thing or two about this area of construction. We are the exclusive UK representative of Crane Materials International (CMI), the USA's leading manufacturer of vinyl and composite piles. Our unique status, in this respect, enables us to cover every conceivable application and offer a huge range of sections.

**“Sheet Piling (UK) Limited can offer the full range of vinyl and composite sheet piles.”**

Vinyl and composite sheet piles are typically used for cut-off walls and the creation of impermeable barriers, where a range of hydrophilic sealant can be pre-applied. They are an excellent solution for flood defence walls and for

use in areas where erosion and scour protection of walls is vital. They are found within many canal and marina basin wall constructions and widely used for contamination, containment or as cofferdams. They are also favoured as light-duty retaining walls, where the retained height is generally less than 2 metres. Overall, they are a viable alternative section to light trench sheets or light section sheet piles.

CMI sheet piles are made from 100% recycled materials and manufactured using energy efficient methods, enabling a overall reduction in carbon footprint to be achieved when using these sheet piles in preference to traditional materials.

The piles provide a rust-free, chemical and contaminant-resistant solution, with a long life, which is maintenance free - creating a major cost benefit. Vinyl sheet piles, which have an

attractive finish that requires no painting, are extremely ductile and can withstand extreme amounts of strain and deflection before a loss of strength occurs.

We can supply both Storeguard vinyl sheets, available in sections with a modulus range of 300cm<sup>3</sup>/m to 1000 cm<sup>3</sup>/m, and more robust Geoguard composition FRP sheet piles, available in a modulus range of 700cm<sup>3</sup>/m to 2000cm<sup>3</sup>/m.

Sheet Piling (UK) Limited can offer the full range of its vinyl and composite sheet piles on a sale only, or supply and installation basis, giving contractors flexibility within their planning. We can also supply driving mandrels on a rental basis.

**“Ground anchors can be utilised as either a permanent or temporary component of a construction project.”**

Scan this QR Code with your smartphone to watch a video of Ground Anchor installation.



# GROUND ANCHORS

Sheet Piling (UK) Limited backs up its core services with a full range of ancillary products, including ground anchors. These provide an economical and practical alternative to propping and can be used in a wide variety of soils.

The main purpose of geotechnical ground anchors is to prevent horizontal movement, while stabilising retaining structures, including sheet pile, bored concrete pile and steel tubular walls. Additionally, they can prevent additional movement or stabilise existing retaining walls or bridge abutments.

Other applications could be in cofferdams, where internal bracing causes construction problems, in dock walls and marine structures, where dock walls need to be stabilised and strengthened, and on river and canal walls, as tie-backs. They can also be used for deep structures, to resist

hydrostatic uplift forces and flotation pressures.

Ground anchors can be utilised as either a permanent or temporary component of a construction project. Permanent anchors incorporate double corrosion protection from grouted and corrugated UPVC duct to BS8081:1989. Temporary anchors can incorporate a single duct, or be a single grouted self-drilling bar.

Ground anchors can be either passive, or pre-stressed to 110% of working load post-installation. They can be installed either vertically, or in an inclined position. Removable anchors can also be used where there are third-party issues beneath adjacent properties.





# SILENT VIBRATION FREE INSTALLATION

Projects in city centres and towns, adjacent to hospitals, existing structures, or embankment slopes need sheet pile installation and extraction to be carried out in a way that generates the lowest level of vibration and noise pollution. Sheet Piling (UK) Limited is the leading specialist in this field, installing sheet piles using state-of-the-art, silent, vibration-free piling equipment. This resolves the issues relating to noise and vibration levels, which accompany conventional vibratory and percussive technology.

Our private fleet of equipment includes 5 Giken UP150 and SW100 pile presses, which assist us as we use over 15 years' experience in installing and extracting sheet piles with no vibration and virtually no noise. This equipment bases its success on the environmentally-friendly press-in method, which hydraulically installs piles silently, and

without vibration, by static load, making use of the "Reaction Force" principle. The silent piler grasps previously installed piles and derives reaction force from the skin friction and interlock resistance of these reaction piles. The reaction force provides press-in force, which hydraulically jacks subsequent piles into the ground, without damage to the environment and existing structures.

The pile presses can be effectively operated in both granular and cohesive soils and we can achieve a pushing force of up to 150 tonnes for pile installation and 160 tonnes for pile extraction. Where soil is dense and stiff, other techniques can be employed, including water jetting and pre-augering, which both assist pile installation.

Sitting alongside our standard Giken Pile Presses, Sheet Piling (UK) Ltd has considerable experience of specialist

pressing equipment including the Giken Super Crush Piler which offers us the benefit of an integrated augering system. This allows sheet piles to be installed in a silent and vibration-free manner, no matter how hard or rocky the ground.

The Giken GRB Clamp Crane and Pile Runner system complete the picture, allowing pile installation to be carried out over bodies of water or embankment slopes, where a traditional piling rig could not gain access.

Through investment in its own, solutions driven equipment, Sheet Piling (UK) Limited has engineered a position from which it can handle any project, whatever the site conditions or the nature of the ground beneath.

**"By using this equipment, we can often remove any need for temporary works' piling gates and achieve high outputs."**

Scan this QR Code with your smartphone to watch a video of Silent Vibration-Free sheet pile installation.



Scan this QR Code with your smartphone to watch a video of Telescopic Leader Rig sheet pile installation.



# TELESCOPIC LEADER RIG INSTALLATION

Our owned fleet also includes a number of modern telescopic leader rigs, which can be fitted with a range of attachments, to suit specific conditions and different stages of the sheet piling process, including vibratory pile driving and extracting, augering, impact driving and static pile pressing operations.

The rigs typically take less than 30 minutes to set up, once on site, and are highly mobile in all types of location. We have both Mobilram and Bauer RTG rigs available, with a number of vibratory hammers, including variable moment technology, which minimises vibration upon startup and shutdown.

Further attachments to the telescopic leader include an auger drive motor, an impact hammer and a hydro-press system. The auger drive motor loosens the soil to enable sheet piles to be driven into the ground more easily.

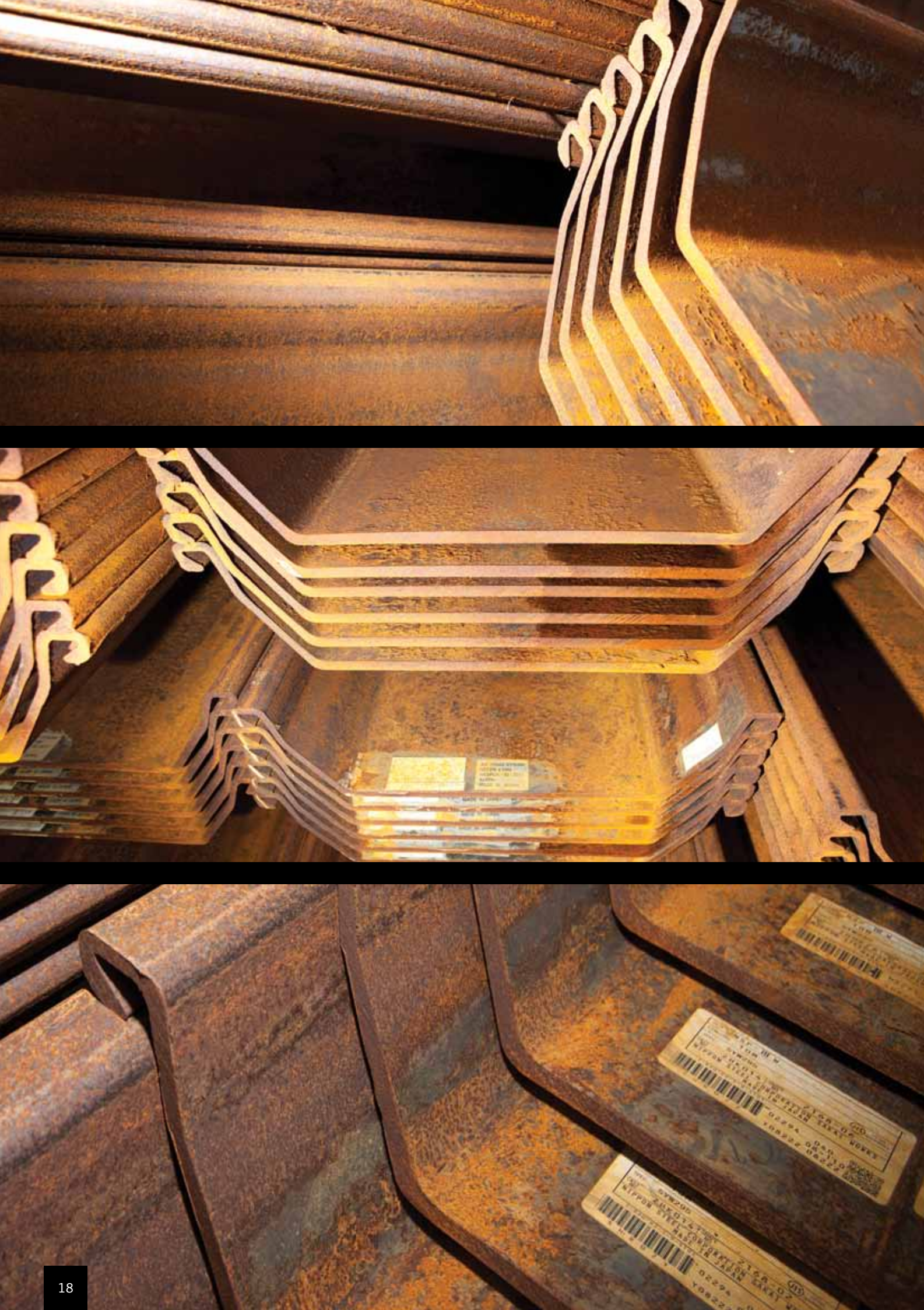
The impact hammers support the backdriving of piles to the final level, ensuring there is no need for the deep lead trenches that crane suspended impact hammers see as a pre-requisite.

The hydro press system allows vibration-free and virtually silent pile installation and extraction to take place. The press drives up to four single poles into the ground during any set up period and both U and Z shaped piles can be installed.

By using this equipment, we can often remove any need for temporary works' piling gates and achieve high outputs – two other benefits of these machines that are ideal for modern civil engineering projects.







# SHEET PILE SALES

As UK and European agents and stockists of Nippon Steel (NSP) and Tokyo Steel (TSP) sheet pile sections, all supplied with independent certification to prove compliance with European Standards BS.EN10248 Parts 1&2, Sheet Piling (UK) Limited can offer a true alternative to those sheet pile sections currently manufactured in mainland Europe. The steel available is independently certified to be equivalent to European Grade S390GP steel.

We can also supply both ex-stock or ex-mill rolling sections. The 600mm wide Larsen 'U' type, Japanese sheet pile sections are supplied in a wide range of sizes and are widely used for various types of permanent and temporary structures. However, we now also have Nippon Steel ZU pile sections available. These are state-of-the-art, hot-rolled pile sections, 900mm wide, which have the structural benefits of Z piles, combined with the installation advantages of U piles.

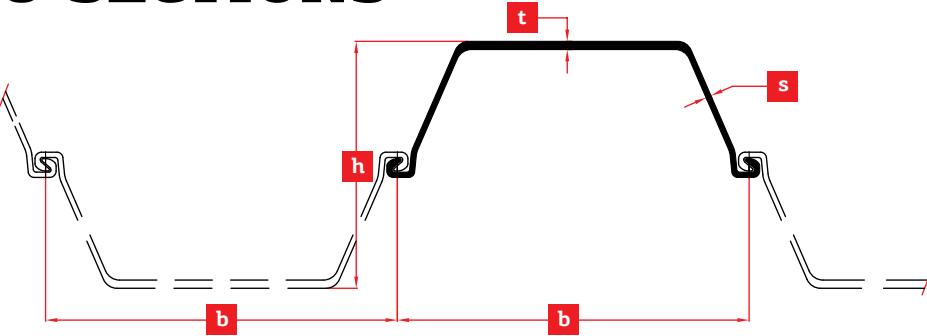
We can supply the Z piles in two section sizes – ZU-900 and ZU-1600 - and deliver significant cost savings through their use, thanks to reduced installation and sealing costs, together with competitive section modulus/weight.

Nippon Steel is used in many port and harbour structures, river revetment, earth retention and cofferdams, where it has acquired an exceptional reputation, thanks to its excellent quality and the construction efficiencies which it facilitates.



# SECTION DATA

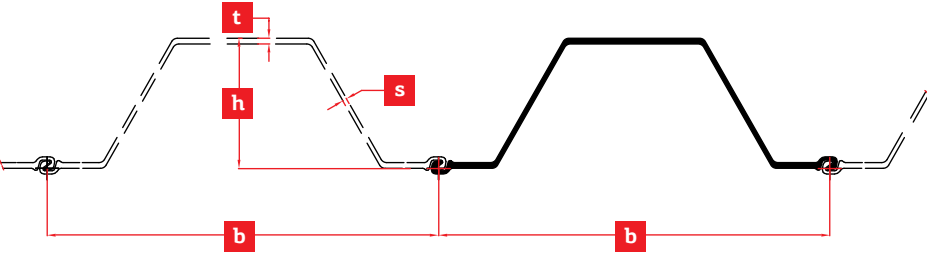
## U-SECTIONS



	Width	Height	Thickness		Sectional Area	Mass		Moment of Inertia	Elastic Section Modulus	Plastic Section Modulus	Class* S390GP
	b	h	t	s (min)	cm <sup>2</sup> /m	kg/m single pile	kg/m <sup>2</sup>	of wall	cm <sup>4</sup> /m	cm <sup>3</sup> /m	cm <sup>3</sup> /m
II.W.	600	260	10.3	8.0	131.2	61.8	103	13000	1000	1141	2
III.W.	600	360	13.4	9.0	173.2	81.6	136	32400	1800	2080	2
IV.W.	600	420	18.0	10.3	225.5	106.0	177	56700	2700	3119	2

\* Classification according to BS EN 1993-5

## ZU-SECTIONS



	Width	Height	Thickness		Sectional Area	Mass		Moment of Inertia	Elastic Section Modulus	Plastic Section Modulus	Class* S390GP
	b	h	t	s (min)	cm <sup>2</sup> /m	kg/m single pile	kg/m <sup>2</sup>	of wall	cm <sup>4</sup> /m	cm <sup>3</sup> /m	cm <sup>3</sup> /m
ZU-900	900	230	10.8	8.3	122.2	86.4	96	10500	902	1050	2
ZU-1600	900	300	13.2	9.6	160.4	113.4	126	24400	1610	1850	2

\* Classification according to BS EN 1993-5





# JET FILTER WEEP HOLE SALES

The erosion of backfill materials by material fines passing through the weep holes of walls can be a big problem for construction projects, which is why the Jet Filter Weep Hole System has been designed to tackle the issue.

This unique system relieves hydrostatic water pressure beyond sheet pile walls, while also preventing the loss of material fines. This is a godsend, as the design of many walls does not consider the pressure of perched or trapped water within the backfill material. Historically, this has caused stability problems and can even jeopardise a whole construction project, or require a revisiting of a project, in order to re-stabilise the wall.

The Jet Filter Weep Hole System is best installed at the time of construction, but can be fitted to existing structures and located wherever the designer recommends, based on calculations of where hydrostatic pressure most needs to be relieved.

The two-component system is easy-to-fit and maintain. Part one is an ABS plastic cylinder, for permanent installation within the wall. Part two is a replaceable filter element tube, inserted, locked in and then removed whenever maintenance or replacement is necessary, using a filter assembly tool. Clogging is minimised through the use of Mirafi Filterweave 300 fabric, which maintains flow in dynamic conditions.

The Jet Filter Weep Hole System is recommended for use in sea walls, bulkheads and shoring and can be fitted to a wide range of materials, including steel, vinyl, aluminium, wood and composite.

# CORNER JUNCTION SHEET PILE SALES

Sheet Piling (UK) Limited is the sole UK and Ireland supplier and stockist of 'hot rolled', interlocking corner or junction clutch bars manufactured by Mannsteadt GmbH, one of the world's leading manufacturers of special steel profiles.

This high quality product is manufactured to European grade S355GP steel specifications and is fully compatible with all sheet pile sections manufactured in Europe and Japan, including both Larssen and Z-type interlocks.

**“Sheet Piling (UK) Limited always has a significant stock of all common profiles available for sale.”**

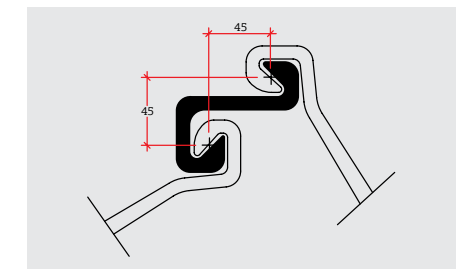
The clutch bar is a huge asset for any construction project in which corner or junction piles need to be used on sheet pile walls or cofferdams, together with clutches to tubular piles within a combi-wall.

The product is problem-free and cost-efficient and Sheet Piling (UK) Limited always has a significant stock of all common profiles available for sale, in lengths up to 12 metres.

We are happy to supply detailed drawings of the profiles which we have on offer, but can basically supply the E20, E21, E22 and Omega sections as currently provided by European Steel Mills.

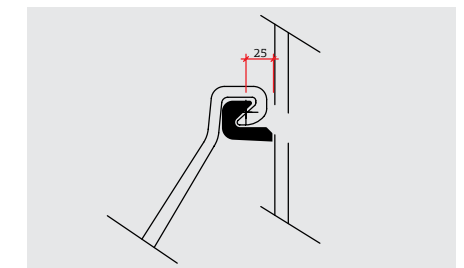
## E20

Mass = 15.38 kg/m



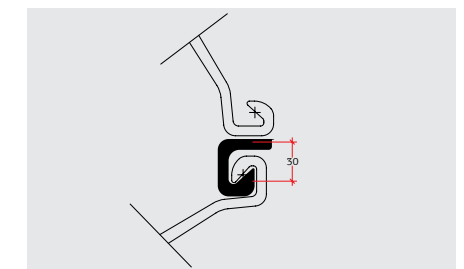
## E21

Mass = 6.27 kg/m



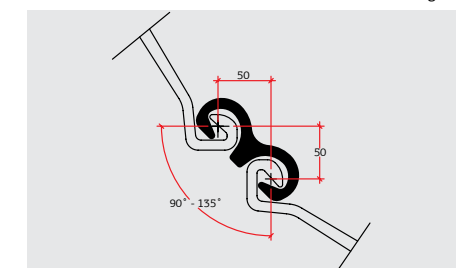
## E22

Mass = 10.22 kg/m



## OMEGA

Mass = 17.33 kg/m





# SUMMING UP

Sheet Piling (UK) Limited is the partner of choice thanks to its expertise, its access to unique products, equipment and solutions and its reputation as a sheet pile specialist that can deliver both stock and suggestions on demand, with an immediacy that is the envy of its competitors.

With its trained eye, know-how and astute insights, it can not only create and contribute to dynamic and hugely successful construction projects, but also deliver welcome cost savings, thanks to its exclusive deals with suppliers, its massive amount of in-stock product and its ability to suggest alternative ways of achieving the same end, using more cost-effective materials and methodologies.

Sheet Piling (UK) Limited does exactly as its name suggests, but complements its basic rationale of supplying sheet piles with so much more. It exceeds customer expectations at every stage of a construction process, using years of experience across a wide range of projects and in a huge variety of locations, to deliver the unexpected - initiative, insights and innovations. This is why taking the decision to work with Sheet Piling (UK) Limited will lay the foundations for a partnership built upon trust, respect and mutual appreciation.

# CONTACT US

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WE ARE MORE  
THAN JUST A  
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