

SPECIFICATION FOR STEEL SHEET PILES

All piling undertaken by MG Construction Ltd will be in compliance with the General Requirements section including appendix 1 to 4 of The ICE Specification for piling and embedded retaining walls Second Edition (SPERW). The guidance notes section C of SPERW shall also be deemed the reference for guidance on allocation of responsibilities under any contract agreement entered into.

SECTION A: GENERAL

1. This specification is to be read with the Company's estimate.
2. The estimate is based on the use of the Company's top driving equipment. Crawler mounted one tonne Ramtek hammer. The rates for driving are based on tender issue Ground Investigation Reports.

Our estimate is based on the premise that a comprehensive site investigation has been carried out in accordance with BS 5930. Errors in estimating costs or providing designs, which result in additional costs as a direct result of lack of or misleading ground information will be charge able to the client.
3. The Company shall not accept responsibility for the stability of existing structures adjacent to or near to the piling operation. It is assumed that the Client will have relevant insurances in place for non-negligence. We confirm that 21.2.1 type insurance can be arranged where specifically instructed at an additional charge subject to survey. We would recommend that the client should monitor the structure and any adjacent structures for any movement during our works.
4. Where possible the positions of underground works and services shall be notified to the Company before piling commences. Even though notified, the Company shall accept no liability for damage to such underground works or services unless agreed in writing by the Company before piling work commences on site.
5. Unless otherwise agreed in writing by the Company, works and services shall be carried out by others, free of charge to the Company at the location of the piling works, as per enclosed Schedule of Attendances and Services.
6. Suitable access and working surfaces to be provided for off loading using craneage from low loader, notifiable delivery, minimum 2 days notice.
7. The Client shall be responsible for providing any protection deemed necessary to any existing structures local to our works. Attendance to this item and any suitable measures taken to be allowed for and carried out by others.
8. Every reasonable attempt will be made to keep noise and vibration to a level compatible with normal usage of the specified piling equipment. However, if the Company's methods of working are to be subjected to further controls from any source whatsoever it will require to be instructed in writing as to the alternative action to take. All additional expenses including overheads plus profit margin resulting from complying with such instructions will be reimbursed to the Company and the Customer will indemnify the Company against any loss, injury or damage arising from complying with such revised instructions.
9. Where piling is to be driven, or extracted, adjacent to existing properties, the Customer will be deemed to have investigated fully the possible effect on the

properties of the piles to be installed/removed by the Company and the Customer will indemnify the Company against any loss, injury or damage arising.

10. In the event that either labour or plant remain idle for a period or periods of time, as a result of any cause outside the Company's control, then such period or periods of time shall be charged at the rig rate quoted or F.C.E.C. Schedule of Daywork rates where applicable and the sum total of standing time charges shall be payable in addition to the price quoted.

SECTION B: DESIGN AND CONSTRUCTION OF WORKS

The works to be carried out by the Company shall be as described in the estimate. The words or phrases used in the estimate or herein shall have meanings in accordance with the following glossary of terms and definitions.

1. **DESIGN** means supply calculations for the safe working load of piles and walings. The tender proposal is based on information given to the Company by the Client. Any variations subsequent to tender requiring redesigns may attract additional costs.

Where design work has been carried out by the Company, an instruction to commence work will be taken as an acceptance and approval by the Customer of the Company's design and design qualifications.

2. **DRIVE PILES** means where indicated, drive steel sheet piles to achieve required depth, or to pile effective refusal.
3. **SETTING OUT** means marking out the site in such a way that the required pile positions can be immediately and accurately identified by the Company's piling operatives.
4. **PILE POSITION** means the location of the pile wall as indicated on the setting out drawing, with a horizontal tolerance of 150mm in any direction.
5. **VERTICAL** means the pile shall be installed in a vertical attitude within a tolerance of 01 in 50 unless circumstances render this difficult to achieve, such as obstructions.
6. **DRIVING RATE** means the average rate of penetration of the pile, with the driving equipment in normal operating mode, from the commencement of driving of each pile to within 300mm of the final depth of the pile.
7. **OBSTRUCTION** means the presence of large stones, rocks, timber, hard filled material etc which impedes the penetration of the pile to the required depth. Where obstructions or physical conditions prevent piles being driven to the required line/level or extracted, work will be stopped pending agreement on a method of proceeding. Any delays/abortive working or additional work will be paid for by the Customer at the quoted rig rate or at daywork rates calculated in accordance with the F.C.E.C. schedules. Refusal shall be defined at 25 mm penetration for 10 blows of 1 tonne hammer at 900 mm drop. Obstruction will be defined as a rate of penetration of under 70 mm for 10 blows at 900 mm drop.

Pile damage caused by the obstruction/physical condition necessitating replacement will be the responsibility of and paid for by the Customer at the rates quoted or at British Steel PLC current delivered list price plus twenty per cent.

8. The Customer shall be responsible for locating, marketing, protecting or where necessary diverting or removing any services, above or below ground, that interfere with the Company's operations and take any other necessary measures for the safe and practical execution of the work.

Prior to commencement, the Company shall require a Permit to Work to be signed by the Customer confirming the above duties have been discharged.

9. Where upon excavation it is discovered that obstructions or physical conditions have caused piles to deviate from the required line, position or inclination, the Company will accept no responsibility for any consequential costs incurred by the Customer.

SECTION C: CONTRACT SUM AND VARIATIONS

1. The type of pile lengths and any calculations for safe working load, allowed for in the estimate are based on the information known by the Company at the time of estimate and are given in good faith. Pile lengths may be varied from those estimated due to the actual strata found.
2. The Contract Sum shall comprise of the quotation value. The tonnage of steel delivered is not remeasurable. The quantum for pitching and driving piles will not be less in quantity than the square meterage of pile installed prior to any final cut down.
3. The tonnage of steel ordered shall be to the offer quantity or the written order value if different. Alterations to steel tonnage supplied will not be accepted after placement of order by MG Construction with steel supplier.
4. Where the driving is delayed by obstructions, the time spent in dealing with the obstruction will be charged at an extra over rate on a cost plus basis in addition to the normal piling rate. Unless otherwise indicated in the Company's Estimate, it shall be assumed that a driving rate of under 150mm min will be subject to an additional charge for obstruction time.
5. Hire of sheeting shall be from site delivery date to date of uplift from site.
6. A buy back rate may be offered to the client and written acceptance received prior to uplift. The client will be responsible for Haulage costs and loading.

Buy back of sheeting shall be based on actual reusable tonnage of sheet removed from site. Credit based at time of removal, not in advance.

Steel sheet piles recovered in sound reusable condition under the contract shall have no credit value if the reusable or offered for purchase at 15% below current scrap steel prices. Piles are less than 90% of the length supplied or the length stated below, whichever is the shorter.

MINIMUM REUSABLE

PILES	PILE LENGTH (M)
6W, 1BXN	6.0
LX8, 1N	6.0
LX12, 2N	6.0
GSP3	7
LX16, 3N	7
LX20	8
LX25, LX32, GSP4, 4N	9
LX6, LX38, LX42	10
PU 6	4.0
PU 8	6.0
PU 12	6.0
PU 18 -1	7.0
PU 22 -1 to 32	8.0
All Other Sections	6.0

7. Extraction if specifically offered to be undertaken by MG Construction Ltd.