



5. PILING

| INFORMATION TO BE INCLUDED | MEASUREMENT RULES | MEASUREMENT & PRICES | DEFINITIONS |
|---|--|----------------------|-------------|
| <p>1. Refer to Introduction, General Rules and Recommendations</p> <p>2. Refer to relevant Specification sections containing particulars of piling work</p> <p>3. Items will be given for:</p> <ul style="list-style-type: none">(a) establishing the piling equipment on site(b) removal of piling equipment from site on completion(c) test loading(d) trial piles | <p>M1. give separately the piles from each level where piles are to be driven from different working levels and include the commencing level in each description</p> | | |



5.1 DRIVEN PILING

| CLASSIFICATION TABLE | | | | MEASUREMENT RULES | MEASUREMENT & PRICES | DEFINITIONS | |
|----------------------|---|----|-----------------------------|---|--|---|---|
| 1. piling | 1. setting up the piling rig | no | | | M1. measure for each pile diameter or capacity | P1. measurement and prices for setting up rig deemed to include for: any necessary excavation required for movement of piling rig about the site | |
| | 2. fabrication or preparation, supply, handling and pitching of piles | | 1. stating size or capacity | <p>1. including whether pitched singly or in clusters, dimensions of cross-sections or designed capacity, protective measures, details of splices in the designed length and the length of pile</p> <p>2. including ringing timber piles with steel bands or other treatment</p> <p>3. including details of pile shoes</p> | <p>M2. measure length of pile from the toe to the underside of the pile cap or to cut off level plus an allowance of 1m for driving and cutting waste</p> <p>M3. group timber piles > 5m long in increments of 1m</p> <p>M4. group other piles >10m long in increments of 2m</p> | P2. measurement and prices for pitching prefabricated piles deemed to include for: any splices necessary in the designed length of pile and for anything necessary to facilitate the execution of piling work | D1. ringing is to protect piles from brooming or splitting during driving |
| | 3. driving piles | m | | <p>4. stating the number of piles</p> <p>5. describing and giving separately where in</p> <p>6. describing when in close contact to form sheeting and describing details of any interlocks</p> <p>7. stating the angle of rake where raking piles</p> | <p>M5. measure from the toe when pitched to the designed level of the toe when driven</p> <p>M6. group timber piles >5m long in increments of 1m</p> <p>M7. group other piles >10m long in increments of 2m</p> | | |

5.1 DRIVEN PILING CONTINUED

| CLASSIFICATION TABLE | | | | MEASUREMENT RULES | MEASUREMENT & PRICES | DEFINITIONS |
|----------------------|---|----------------|---|--|--|--|
| piling cont. | 4. cutting off any excess length of piles | no | | 8. describing where below water and the depth of water to cut off level 9. describing any ringing or other final protection of timber piles 10. describing where exposing reinforcement to concrete piles | | |
| 2. sheet piling | 1. supply, handling, pitching and driving of sheet piling | m ² | 1. stating overall plan length or girth | 1. describing the driven depth in increments of 2m, whether the sheet piling is to be left in or extracted and for any necessary strutting and waling and details of laps, interlocks and angles and of any surface protective treatment of piling 2. describing where required to hold out water | M8. measure as the net area placed in position from the toe to the cut off or finished level M9. make no allowance for corrugated, grooved, ribbed or other irregular shaped surfaces | P3. measurement and prices deemed to include for: necessary moving of the piling equipment around the site including any necessary excavation required for such movement |
| | 2. extracting piling | | 2. stating depth | | M10. measure depth from the toe to cut off or finished level | |
| | 3. cutting off piling | m | | 3. describing where below water and the depth of water to cut off level | M11. measure the net length to be cut | |
| | 4. splicing to piling | | | | M12. measure the net length to be spliced and state the number of spliced | D2. splicing used to lengthen piling in position after it has been partly driven |



5.2 CAST IN-SITU PILING

| CLASSIFICATION TABLE | | | | | MEASUREMENT RULES | MEASUREMENT & PRICES | DEFINITIONS |
|--|---|----|-----------------------------|---|---|--|-------------|
| 1. cast in-situ driven concrete piling | 1. setting up the piling rig | no | | | M1. measure for each pile type | P1. measurement and prices for setting up rig deemed to include for: any necessary excavation required for movement of piling rig about the site | |
| | 2. piles | m | 1. stating size or capacity | 1. including reinforcement, concrete and the provision, driving and subsequent extraction of temporary casing, the average cut off length and number of piles | M2. measure as the driven depth of casing from commencing level to the designed level of the bottom of the casing when driven | P2. measurement and prices for piles deemed to include for: any splices required in the designed length of pile, the provision and subsequent extraction of temporary liners, disposal of excavated material and for anything necessary to facilitate the excavation of piling work and for cleaning out the bottom of bored holes preparatory to pouring concrete | |
| | 3. permanent liners | m | | | M3. measure when specified M4. measure from commencing level to the depth required by the specification | | |
| | 4. forming special bases | no | | | M5. describe bases | | |
| | 5. trimming the tops of piles 6. extra length of reinforcement protruding beyond the finished level of piles | | | | | | |



5.2 CAST IN-SITU PILING CONTINUED

| CLASSIFICATION TABLE | | | | | MEASUREMENT RULES | MEASUREMENT & PRICES | DEFINITIONS |
|---------------------------------------|---------------------------------|----|-----------------------------|---|--|--|-------------|
| 2. cast in-situ bored concrete piling | 1. setting up the piling rig | no | | | M6. measure for each pile diameter | P3. measurement and prices for setting up rig deemed to include for: any necessary excavation required for movement of piling rig about the site | |
| | 2. boring for pile holes | m | 1. stating diameter | 1. including the provision and subsequent extraction of temporary liners, the classification of the material to be excavated whether single or in groups, the min and max depth of excavation, the number of holes, the total volume of excavation and the disposal of excavated material | | | |
| | 3. permanent liners | | | | M7. measure when specified M8. measure from commencing level to the depth required by the specification | | |
| | 4. under-reaming bored holes | no | 2. stating diameter of hole | 2. including the increase in diameter | | | |
| | 5. socketing in rock | | | | | | |
| | 6. cleaning out bottom of holes | | | | | | |
| | 7. testing bottom of holes | | | | | | |
| | 8. concrete 9. reinforcement | | | | M9. measure in accordance with Section 6 Concrete | P4. measurement and prices deemed to include as for Section 6 Concrete | |