REINFORCES CONCRETE PILES

REINFORCED CONCRETE PILES

GSG *Reinforced Concrete Piles are manufactured under factory controlled condition that are certified to MS ISO 9001:2015 by Sirim QAS International Sdn. Bhd. to the highest quality standards.*
GSG *R.C. piles are manufactured in rigid and dimensionally accurate moulds to facilitate the accurate fixing of steel wires and steel reinforcement cages and joint plates. Our R.C. piles are produced by good Ordinary Portland Cement (OPC), which can perform much better in workability, durability and long term strength.*

Thus, GSG *R.C. piles is the preferred choice for the infrastructure and construction industry.*

DESIGN & SPECIFICATIONS

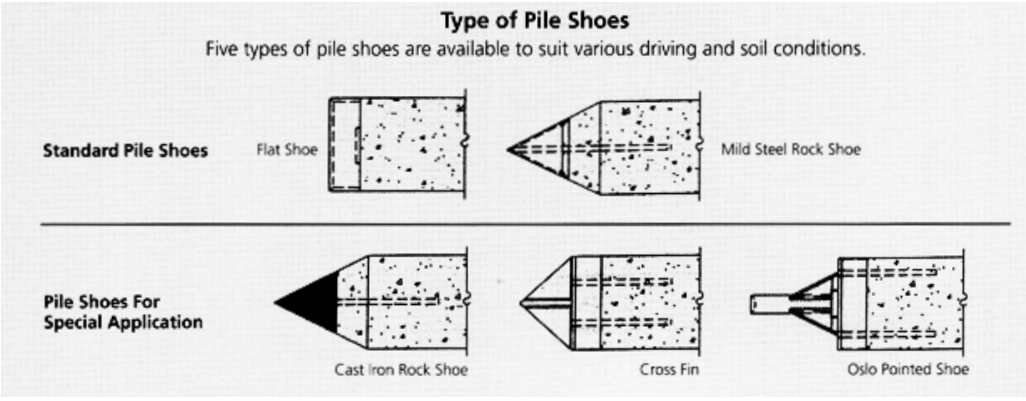
GSG *R.C. piles are precast reinforced concrete pile designed and produced conforming to MS 1314 Malaysia SIRIM standard. Durable and simple to install, GCP piles comes in many sizes ranging from 125mm x 125mm to 400mm x 400mm measurements. They are suitable for building construction work & all civil engineering projects*

MATERIAL SPECIFICATION

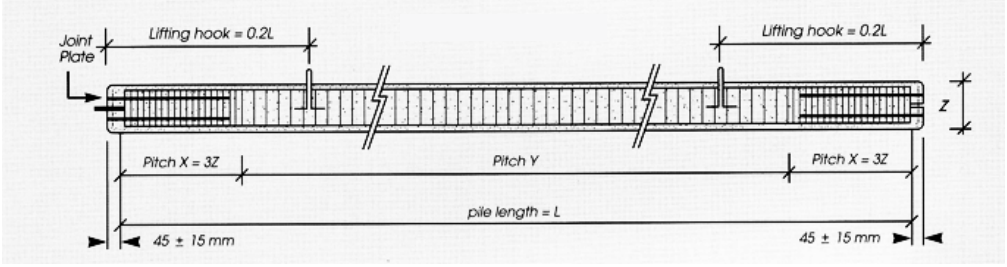
Cement	MS 522	Specification for Ordinary Portland Cement (OPC)
Aggregate	BS 882/MS 29 Mining Sand	20mm Aggregates From Natural Sources For Concrete
Steel Reinforcement	BS 4449/MS 146	
Admixture	BS 5075/MS 922 Super Plasticizer	Specification For Concrete Admixtures
Cold Drawn Wire	BS 4482/MS 144 Lateral Reinforcement Stirrup/ Link	Cold Reduced Mild Steel Wire For The Reinforcement Of Concrete
Mild Steel Plate	BS EN 10137-1	End Plate (Grade 43A)
Concrete		Grade 45

Type of Pile Shoes

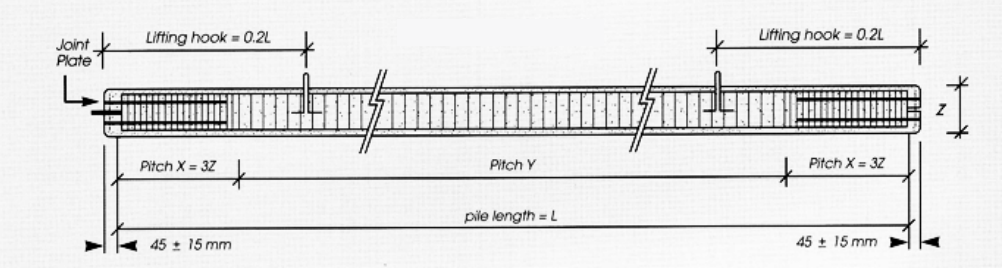
5 types of piles are available to suit various driving and soil conditions.



Typical Initial Pile.



Typical Extension Pile



TECHNICAL CALCULATION

Safe working load = 0.275 fcu.Ac + fsc.As

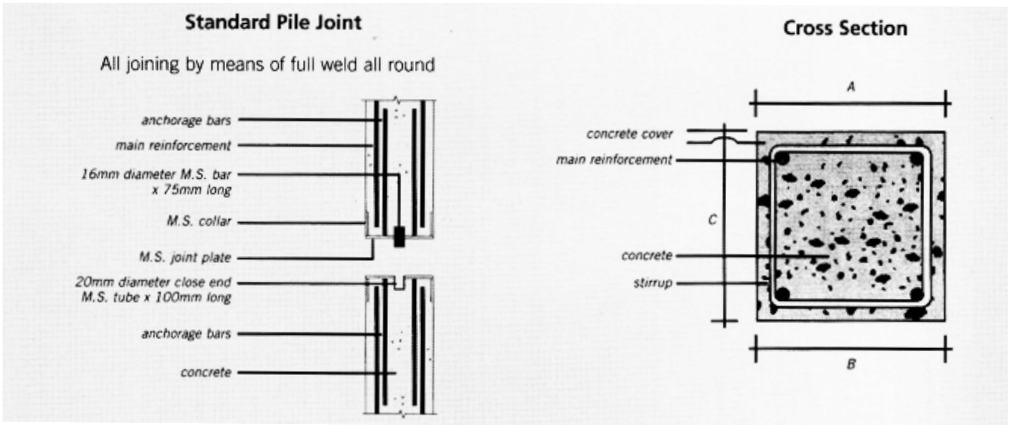
Where,

fcu = Characteristic Cube Strength of concrete at 28 day (45 N/mm)

Ac = Area of Concrete

fsc = 175 N/mm for High Yield Reinforcement

As = Area of Steel



GCP Piles		Size (mm)	400 x 400	380 x 380	350 x 350 (T2)	350 x 350 (T1)	300 x 300	280 x 280	250 x 250 (T2)	250 x 250 (T1)	230 x 230	200 x 200 (T2)	200 x 200 (T1)	175 x 175 (T2)	175 x 175 (T1)	150 x 150	125 x 125
	DIMENSION	Length (m)	12,9, 6,3	12,9, 6,3	12,9, 6,3	12,9, 6,3	12,9, 6,3	12,9, 6,3	12,9, 6,3	12,9, 6,3	9,6,3	6,3	6,3	6,3	6,3	6,3	6,3
		A (mm)	405	385	355	355	305	284	254	254	234	204	204	178	178	153	128
		B (mm)	395	375	345	345	295	276	246	246	228	196	196	172	172	147	122
		C (mm)	400	380	350	350	300	280	250	250	230	200	200	175	175	150	125
Concrete grade (N/mm^2)			45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Main reinforcement bar Nos. x dia. (mm)			4 x T20	4 x T20	4 x T20	8 x T12	4 x T16	4 x T16	4 x T16	8 x T10	4 X T12	4 x Y12	4 x Y10	4 x Y10	4 x Y9	4 x Y9	4 x Y9
WIRE RODS		Wire diameter (mm)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.5	4.5	4.5	4.5	4.5	4.5
		Pitch X (mm)	30	35	35	35	40	40	40	40	45	40	40	40	40	40	40
		Pitch Y (mm)	100	100	110	110	110	110	110	110	110	100	90	90	90	85	85
STEEL PLATE		Plate thickness (mm)	10	10	10	10	9	9	9	9	9	9	6	6	6	4.5	4.5
		Concrete cover (mm)	40	40	40	40	40	40	40	40	30	30	30	30	30	30	30
AXIAL LOAD CAPACITY		Max. safe structural working load (Tonnes)	220	201	173	167	125	111	91	88	73	55	55	43	42	32	24
		Recommended working load (Tonnes)	190	170	145	145	105	95	75	75	60	45	45	35	35	25	20

**Existing Product*

Notice: Due to produce development, the above technical information is subject to change without prior notice.