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Quality

We at **EC Precast Sdn Bhd** believe the essence of a good business is giving value to all our stakeholders, including our customers. Such values are measured by our focus on quality. Total quality management is the norm in **EC** Precast Sdn Bhd and this is backed by our products ISO certifications.

Renowned for technical expertise and service excellence, EC Precast Sdn Bhd is and ISO 9001:2015 certified company with total quality management as its norm. Products we produced under EC Piles are premium quality, reinforced concrete piles manufactured to the highest degree of quality standards and supported by ISO Certifications. With quality imbedded as culture, **EC Piles** are the perfect building blocks for the future of any construction.

EC Piles is today the preferred choice for the infrastructure and construction industry.

EC Piles' precast reinforced concrete composite piles (RCCP) are designed to conform to BS 8004-1986 and MSEN 206-2016 standards.

Since 2018, the development of RCCP enables us to enhanced the quality of our products, and to solve concrete chipping and surface peel off issue during handling and transferring of piles.

The advantages of RCCP include better impact resistance, more environmentally friendly & better crack control.

Various tests are conducted on RCCP: Compression Test (BS EN 12390-2), Bending Test (MS 1314-2) & Shear Test (GB13476-2009), to ensure the product's performance. The test results are encouraging.

EC Piles come in various pile size ranging from 125mm x 125mm to 450mm x 450mm measurements with more cost-effective values. EC Piles are suitable for building construction works and all civil engineering projects.

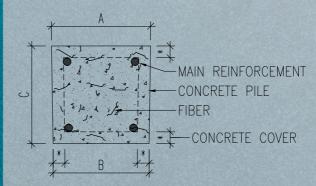
Technical Calculations

Capacity of EC Piles* in accordance to standards specified. Safe working load = 0.275fcu•Ac + fsc• As

fcu = characteristic strength of concrete at 28 days (50N/mm²) Ac = area of concrete As = area of main reinforcement

fsc = 175N/ mm² for high yield steel

Pile Cross Section



Material Specifications

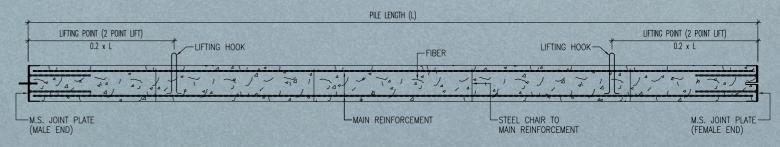
Constituent Materials

Cement	MS 522 / BS EN 197-1
Steel Reinforcement	BS 4449: 1997 / MS 146: 2014
Aggregates	BS 882 / MS 29
Admixtures	BS 5075 / MS 922 Super Plasticizer
Fibre	EN 14651, EN 14889-1 EN 14889-2 (Class II) ASTM C1116 (Type I & III)
Mild Steel Plate	BS EN 10147-1 End Plate (Grade 43A)

Standard Pile End



Typical Extension Pile



	7		Size (mm)	125 x 125	150 x 150	175 x 175	200 x 200	230 x 230	250 x 250	280 x 280	300 x 300	350 x 350	380 x 380	400 x 400	450 x 450	
SNC	Ois		Length (m)	6,3	6,3	6,3	9,6,3	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	
	AENSK		A (mm)	128	153	178	204	234	254	284	305	355	385	405	455	
Į į	MID		B (mm)	122	147	172	196	226	246	276	295	345	375	395	445	
<u>2</u>			C (mm)	125	150	175	200	230	250	280	300	350	380	400	450	
SPECIFICATIONS		Main reinforcement bar nos. x dia.(mm) Steel Chair Diameter Plate Thickness (mm)		4xY9 4.5 4.5	4xY9 4.5 4.5	4xY9 4.5 6	4 x T10 4.5 6	4 x T12 5.5 6	8 x T10 5.5 8	4 x T16 5.5 8	4 x T16 5.5 8	4 x T20 6 9	4 x T20 6 9	4 x T20 6 9	4 x T25 6 12	
		Concrete cover (mm)		30	30	30	30	30	40	40	40	40	40	40	40	
PRODUCT	LOAD	Max safe structural working load (tonnes)	Concrete grade	26	35	46	61	81	97	122	140	191	222	244	313	
<u> </u>	APA	Recommended working load (tonnes)	- 50	21	28	37	48	65	80	100	115	160	185	205	275	

Note: 1. Custom-made starter piles with various type of shoe, such as Cross Fin Shoe, Oslo Shoe, Pointed Cast Iron Shoe, can be manufactured upon customer's request. 2. The working load recommended based on the theoretical structural capacity of piles but subject to soil conditions & other engineering considerations. Technical information is subject to change without prior notice due to the product development.