



**Building the Foundation for the Future** 







MS ISO 9001:2015 REG NO. AR1945

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**SPECIFICATIONS** 

**PRODUCT** 

# 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 an ISO 9001:2015 certified company with total quality management as its norm. Products we produced under **EC Piles**<sup>+</sup> 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**<sup>+</sup> are the perfect building blocks for the future of any construction.

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

## **Product & Application**

#### **REINFORCED CONCRETE COMPOSITE PILES**

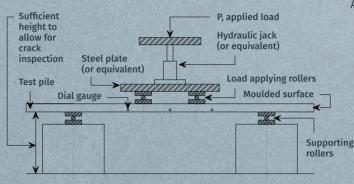
**EC Piles**<sup>+</sup> are precast reinforced concrete composite piles designed as an enhanced product conforming to BS 8004-1986 and MSEN 206-2016 standards. Durable, reliable and simple to install, EC Piles+ come in various size ranging from 125mm x 125mm to 450mm x 450mm measurements with more cost effective values . **EC Piles**<sup>+</sup> are suitable for building construction works and all civil engineering projects.

### **Technical Calculations**

Capacity of EC Piles<sup>+</sup> in accordance to standards specified. Safe working load = 0.275fcu·Ac + fsc· As

fcu = characteristic strength of concrete at 28 days (50N/mm<sup>2</sup>) Ac = area of concrete As = area of main reinforcement fsc = 175N/ mm<sup>2</sup> for high yield steel

#### **BENDING TEST: MS1314 Compliance**



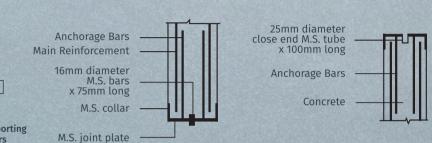
## **Material Specifications**

#### **Constituent Materials**

Cement	MS 522 / BS EN 197-1						
Steel Reinforcement	BS 4449 : 1997 / MS 146 : 2014						
Aggregates	BS 882 / MS 29						
Admixture	BS 5075 / MS 922 Super Plasticizer						
Cold Drawn Wire	BS 4482 / MS 144						
Fibre	EN 14651, EN 14889-1&2 ASTM C1116						
Mild Steel Plate	BS EN 10137-1 End plate (Grade 43A)						

#### STANDARD PILE IOINT

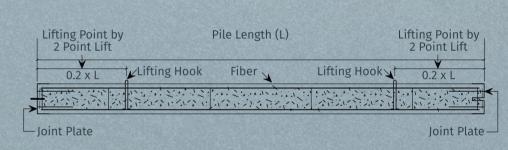
All joining by means of full weld all round



#### **Cross Section**

# Main Reinforcement Concrete Concrete Cover

#### Typical Extension Pile



	_		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	
	ISION		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	
	EN8		A (mm)	128	153	178	204	234	254	284	305	355	385	405	455	
	DIM		B (mm)	122	147	172	196	226	246	276	295	345	375	395	445	
	_		C (mm)	125	150	175	200	230	250	280	300	350	380	400	450	
		Main reinforcement bar nos. x dia.(mm) Link Diameter (mm) 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	
	LOAD	Max safe structural working load (tonnes)	Concrete grade	26	35	46	61	81	97	122	140	191	222	244	313	
	APA	Recommended working load (tonnes)		21	28	37	48	65	80	100	115	160	185	205	275	



# **Core Values**

To have respect for others
To be ethical
To be trustworthy & innovative

#### Sales enquiries:

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