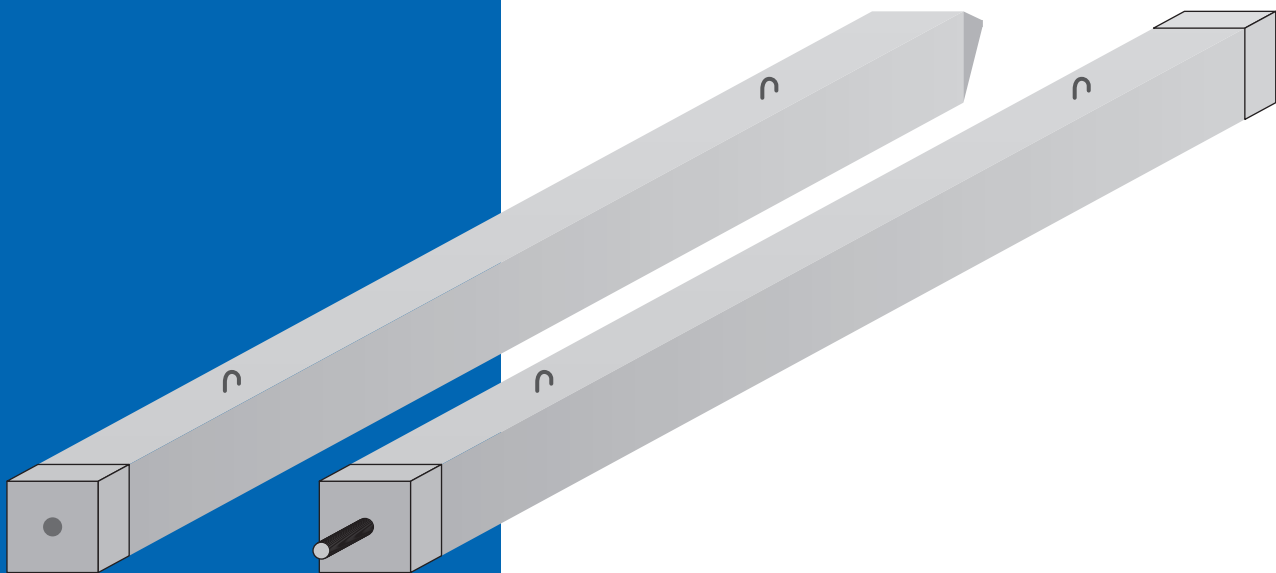




# REINFORCED CONCRETE PILES



**SIRIM**  
CERTIFIED TO MS 1314  
REG NO 021083



**SIRIM**  
MS ISO 9001 : 2008 REG NO AR 2824

**SEDSCO Precast Sdn. Bhd.** (328669-K)

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## SEDCO PRECAST SDN BHD REINFORCED CONCRETE PILES

Sedco Precast Sdn. Bhd. (SPSB) reinforced concrete piles are designed in accordance with MS1314 and manufactured under strict quality control systems.

Our piles can be categorized into 2 ranges namely:-

- ▶ MS standard reinforced concrete piles
- ▶ SPSB commercial reinforced concrete piles



Computerised Batching Plant



In-house QAQC



Batching Plant With Covered Hopper

## SPECIFICATION

SPSB RC piles are designed to BS8004 - British Standard Code of Practice for Foundation with reference to MS1314.

### CONCRETE

Cement	MS 522	Ordinary Portland Cement
Aggregates	MS 29, MS 30	Fine / Coarse Aggregates
Admixture	MS 922	Superplasticizer

### STEEL

Hard Drawn Wire	MS 144	Lateral Reinforcement Bars
Main Reinforcement	MS 146	Longitudinal Reinforcement
Mild Steel Plate	BS 4360 (Grade 43A)	End Plates

## MAXIMUM AXIAL LOAD CAPACITY

Calculated in accordance to BS 8004 and CP116

Maximum axial load =  $0.275 f_{cu} A_c + f_s A_s$  where

$f_{cu}$  = Characteristic strength of concrete at 28 days

$A_c$  = Area of concrete

$f_s$  = Permissible compressive stress for longitudinal reinforcement

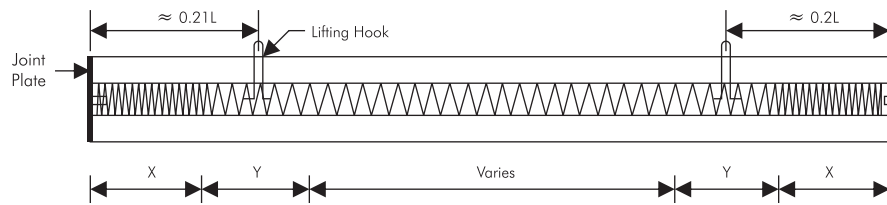
=  $0.55 f_y$  (not greater than 175N/mm)

$f_y$  = Characteristic yield strength of steel for longitudinal reinforcement

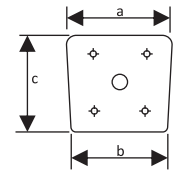
$A_s$  = Area of longitudinal steel reinforcement

## PILE'S DIMENSIONS AND DETAILS

The section properties and structural capacities of SPSB piles have been tabulated below to assist in the selection of piles preliminary consideration.



Extension Pile Elevation



Typical End Elevation of Pile

MS STANDARD PILES - GRADE 45										
Nominal Size	Dimensions			Main Reinforcement	Lateral Reinforcement			Recommended Working Load	Maximum axial Load Capacity	Joint Plate Thickness
	a	b	c		Wire Size	X	Y			
mm	mm	mm	mm	nos, Dia (mm)	mm	mm	mm	tonne	tonne	mm
150 x 150	155	145	150	4T10	4.5	450	450	25	33	6
200 x 200	205	195	200	4T12	4.5	600	600	45	57	9
250 x 250	258	250	254	4T16 / 8T10	5.0	750	750	73	90	9
300 x 300	310	300	305	4T16 / 8T12	6.0	900	900	105	118	9

SPSB COMMERCIAL PILES - GRADE 45										
Nominal Size	Dimensions			Main Reinforcement	Lateral Reinforcement			Recommended Working Load	Maximum axial Load Capacity	Joint Plate Thickness
	a	b	c		Wire Size	X	Y			
mm	mm	mm	mm	nos, Dia (mm)	mm	mm	mm	tonne	tonne	mm
150 x 150	155	145	150	4T9	4.5	450	450	25	33	4.5
200 x 200	205	195	200	4T10	4.5	600	600	45	57	6
250 x 250	258	250	254	4T16 / 8T10	5.0	750	750	73	90	6
300 x 300	310	300	305	4T16 / 8T12	6.0	900	900	105	118	6

SPSB can also design and manufacture to meet any other specification.



Production In Progress

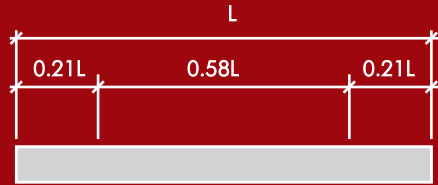


Production & Storage Area



## Stacking of Piles

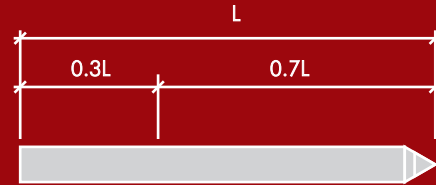
Piles shall be evenly stacked on timber bearers placed at 0.21L from both ends of the piles with the bottom layer well above ground.



**TWO POINT PICK-UP**

## Handling of Piles

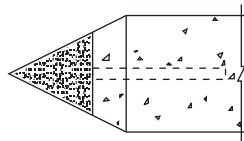
For unloading / transferring piles within worksite, use the 2 lifting hooks provided (2 point pick-up). When pitching a pile, please use a wire rope to go round the pile at 0.3L from the upper end. (refer 1 point pick-up).



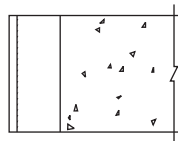
**ONE POINT PICK-UP**

## Types Of Pile Shoes

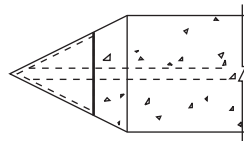
5 types of pile shoes are available for initial piles to suit various driving and soil conditions.



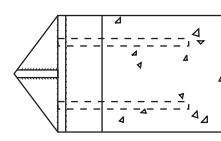
Type 1 :  
Cast Iron Shoe



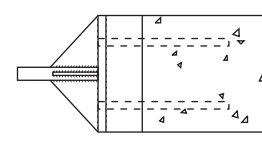
Type 2 :  
Plain Shoe



Type 3 :  
Fabricated Pointed Shoe



Type 4 :  
X-Pointed Shoe



Type 5 :  
Rock Shoe

