

PC SHEET PILES

DESCRIPTION

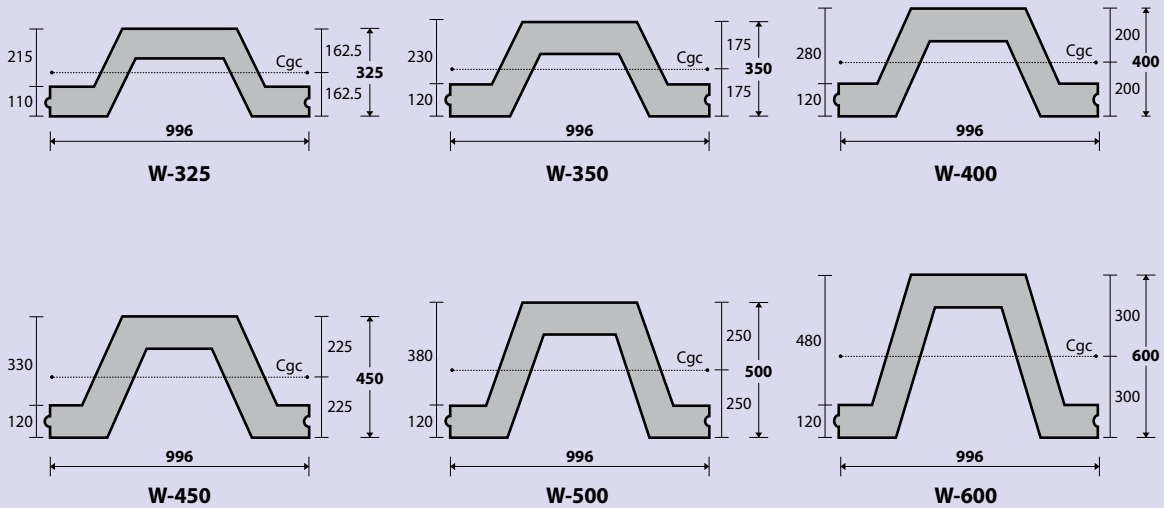
Type of Sheet Piles
 CPC Sheet Piles : Corrugated Prestressed Concrete Sheet Piles
 FPC Sheet Piles : Flat Prestressed Concrete Sheet Piles
 FRC Sheet Piles : Flat Reinforced Concrete Sheet Piles

Method of Installation
 Dynamic Pile Driving :
 1. Vibro Hammer (corrugated type) + Water Jet (special requirement)
 2. Diesel Hammer (flat type)

DESIGN & MANUFACTURING REFERENCE

Design	JIS A 5326 - 1988	Prestressed Concrete Sheet Piles
	JIS A 5325 - 1981	Reinforced Concrete Sheet Piles
	SNI 2847 - 2013	Indonesian Standard Code for Concrete
Manufacturing	JIS A 5326 - 1988	Prestressed Concrete Sheet Piles
	JIS A 5325 - 1981	Reinforced Concrete Sheet Piles
	WB - PCP - PS - 08	Production Manufacturing Procedure

PRODUCT SHAPE & SPECIFICATION | CORRUGATED PRESTRESSED CONCRETE SHEET PILES



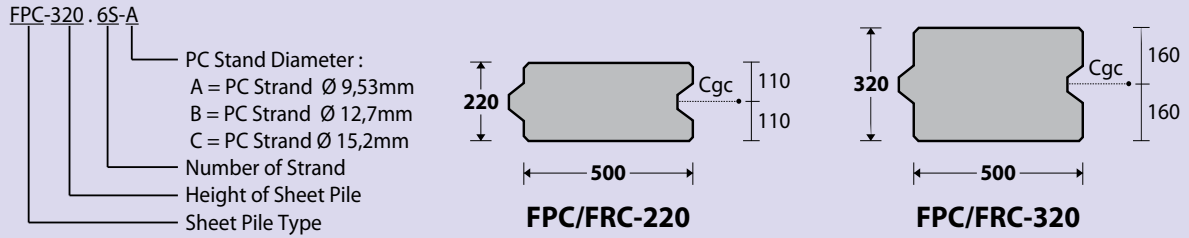
CPC SHEET PILES SPECIFICATION

Concrete Compressive Strength $f_c' = 62 \text{ MPa}$ (Cube 700 kg/cm²)

Type	Width (mm)	Cross Section (cm ²)	Section Inertia (cm ⁴)	Unit Weight (kg/m)	Class	Moment (ton.m)		Allow. Service Moment (ton.m)		Length* (m)
						Crack	Break	Temporary	Permanent	
W-325	996	1,315	134,264	329	A	11.40	22.80	10.07	6.74	8 - 15
					B	13.30	26.60	11.97	8.64	8 - 16
W-350	996	1,468	169,432	368	A	15.60	31.20	14.04	10.14	9 - 17
					B	17.00	34.00	15.44	11.54	10 - 18
W-400	996	1,598	248,691	400	A	20.10	40.20	18.10	13.08	10 - 18
					B	23.40	46.80	21.40	16.38	11 - 20
W-450	996	1,835	353,363	459	A	26.90	53.80	24.37	18.04	11 - 20
					B	30.70	61.40	28.17	21.84	12 - 21
W-500	996	1,818	462,373	455	A	35.20	70.40	32.22	24.76	12 - 22
					B	40.40	80.80	37.42	29.96	13 - 24
W-600	996	2,078	765,907	520	A	50.60	101.20	46.48	36.19	14 - 25
					B	59.60	119.20	55.48	45.19	15 - 27

Note : * Length of Concrete Corrugated Sheet Piles may exceed usual standard whenever lifted in certain position

PRODUCT SHAPE & SPECIFICATION | FLAT CONCRETE SHEET PILES



FRC SHEET PILES SPECIFICATION

Concrete Compressive Strength (Class A) $fc' = 28 \text{ MPa}$ (Cube 350 kg/cm²)
 Concrete Compressive Strength (Class B) $fc' = 42 \text{ MPa}$ (Cube 500 kg/cm²)

Type	Width (mm)	Cross Section (cm ²)	Section Inertia (cm ⁴)	Unit Weight (kg/m)	Class	Moment Crack (ton.m/0.5m)	Moment (ton.m/0.5m) Capacity	Moment (ton.m/0.5m) Breaking	Length* (m)
FRC-220	500	1,085	43,802	271	A	1.50	3.20	4.00	4 - 7
					B	1.84	4.70	5.88	4 - 7
FRC-320	500	1,585	135,455	396	A	3.20	5.01	6.26	4 - 8
					B	3.92	7.41	9.26	4 - 9

FPC SHEET PILES SPECIFICATION

Concrete Compressive Strength $fc' = 42 \text{ MPa}$ (Cube 500 kg/cm²)

Type	Width (mm)	Cross Section (cm ²)	Section Inertia (cm ⁴)	Unit Weight (kg/m)	Class	Moment Crack (ton.m/0.5m)	Service Moment (ton.m/0.5m)		Length* (m)
							Temporary	Permanent	
FPC-220	500	1,085	43,802	271	6S-A	3.38	2.85	1.54	4 - 9
					8S-A	3.85	3.32	2.01	4 - 10
					10S-A	4.30	3.77	2.46	4 - 10
					6S-B	4.48	3.95	2.64	4 - 11
					8S-B	5.22	4.69	3.38	4 - 11
					6S-C	5.39	4.86	3.55	4 - 12
					10S-B	5.89	5.36	4.05	4 - 12
					8S-C	6.31	5.78	4.47	4 - 13
FPC-320	500	1,585	135,455	396	6S-A	6.24	5.12	2.32	4 - 10
					8S-A	6.98	5.86	3.06	4 - 11
					10S-A	7.70	6.58	3.78	4 - 12
					6S-B	7.98	6.86	4.06	4 - 12
					12S-A	8.39	7.27	4.47	4 - 12
					14S-A	9.07	7.95	5.15	4 - 12
					8S-B	9.21	8.09	5.29	4 - 13
					6S-C	9.51	8.39	5.59	4 - 13
					16S-A	9.73	8.61	5.81	4 - 13
					10S-B	10.37	9.25	6.45	4 - 13
					8S-C	11.12	10.00	7.20	4 - 14
					12S-B	11.48	10.36	7.56	4 - 14
					14S-B	12.53	11.41	8.61	4 - 15
					10S-C	12.62	11.50	8.70	4 - 15
					16S-B	13.52	12.40	9.60	4 - 15

Note : * Length of Flat Prestressed Concrete Sheet Piles may exceed usual standard whenever lifted in certain position

PRODUCT APPLICATION



Retaining Wall



River Normalization



Underpass Wall



Breakwater Structure