



# Steel Sheet Piling

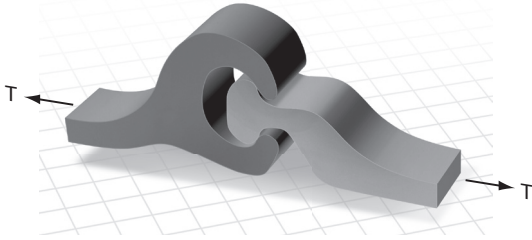
## Quick Reference Guide

Featuring  
The New  
**PZC 39**



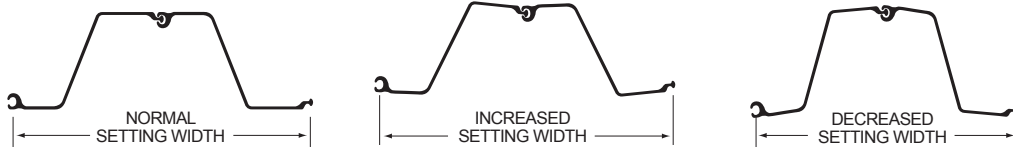
**GERDAU**

# BALL AND SOCKET INTERLOCK

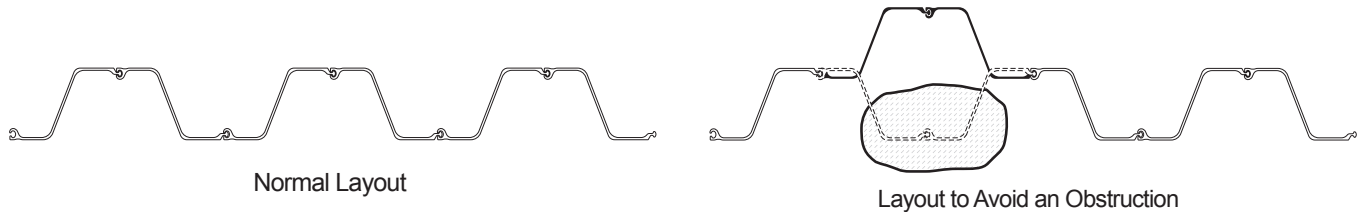


## Advantages of Ball-and-Socket Interlock:

- Most rugged, durable, and flexible interlock available
- Easier setting, driving, and extraction
- Highest interlock "T" (tensile) strength relative to other Z-Profiles
- Ideal for reuse in multiple projects
- Higher "buy back/resale" value
- Flexible when setting, allows adjustment by interlock swing/rotation



The reversed interlock arrangement can be utilized to bypass obstructions encountered along the driving line or to shift the driving line.



**100% MELTED AND HOT-ROLLED IN THE UNITED STATES**

Visit [www.sheet-piling.com](http://www.sheet-piling.com) for the extensive solution list and downloadable CAD files.  
For further assistance, please contact us directly.

## COVER PLATED PZC 39 PROPERTIES (TO OBTAIN HIGHER SECTION MODULI)

Section	Nominal Width	Plate Size	Per Single Section				Per Unit of Wall			
			Area	Weight	Total Surface Area	Nominal Coating Area*	Weight		Moment of Inertia	Section Modulus
			in. <sup>2</sup> (cm <sup>2</sup> )	lbs/ft (kg/m)	ft. <sup>2</sup> /ft (m <sup>2</sup> /m)	ft. <sup>2</sup> /ft (m <sup>2</sup> /m)	Plates Full Length	Plates Half Length	in. <sup>4</sup> /ft (cm <sup>4</sup> /m)	in. <sup>3</sup> /ft (cm <sup>3</sup> /m)
PZC 46-CP (PZC 39)	22.5	3 x 0.50	24.76	84.2	6.82	6.32	44.9	42.1	947.8	86
	572	76 x 13	159.8	125.2	2.08	1.93	219.3	205.6	129,400	4,630
PZC 48-CP (PZC 39)	22.5	3 x 0.625	25.51	86.7	6.86	6.36	46.3	42.9	997	89.4
	572	76 x 16	164.6	129	2.09	1.94	226.1	209.5	136,100	4,810
PZC 54-CP (PZC 39)	22.5	3 x 1.00	27.76	94.4	6.96	6.48	50.3	44.9	1,151	99.9
	572	76 x 25.4	179.1	140.5	2.13	1.98	245.6	218.5	157,100	5,370

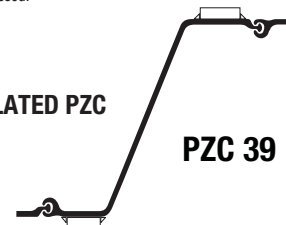
\*Both sides of sheet; excludes socket interior and ball of interlock

- Notes:
- Best economy is obtained when plate length is limited to area of high moment.
  - Cover plate length depends upon moment curve.
  - Fillet weld should be sized to adequately resist design loads. Weld requirements should be specified by design engineer.

All listed dimensions are nominal. Due to rolling practices, variations in web and flange thickness is common. Permitted variations for such dimensions are not addressed.

COVER PLATED PZC

PZC 39



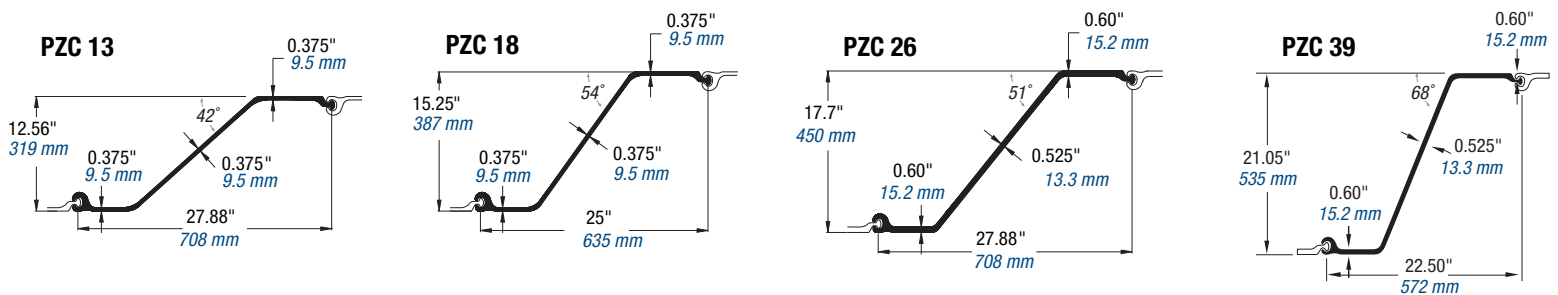
# PZC SHEET PILING PROPERTIES

PZC profiles are named for their strength in metric designations. For example, PZC 18 has a Section Modulus of 1,800 cm<sup>3</sup>/meter. **Make PZC sheet piling your first choice for its unmatched combination of drivability, ruggedness and strength to weight efficiency.**

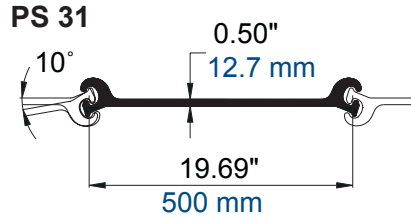
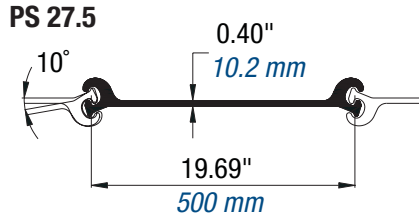
Section	Nominal Width	Wall Depth (Height)	Web Thickness	Flange Thickness	Per Single Section						Per Unit of Wall			
					Area	Weight	Moment of Inertia	Section Modulus	Total Surface Area	Nominal Coating Area*	Area	Weight	Moment of Inertia	Section Modulus
					in. <sup>2</sup> (cm <sup>2</sup> )	lbs/ft (kg/m)	in. <sup>4</sup> (cm <sup>4</sup> )	in. <sup>3</sup> (cm <sup>3</sup> )	ft <sup>2</sup> /ft (m <sup>2</sup> /m)	ft <sup>2</sup> /ft (m <sup>2</sup> /m)	in. <sup>2</sup> /ft (cm <sup>2</sup> /m)	lbs/ft <sup>2</sup> (kg/m <sup>2</sup> )	in. <sup>4</sup> /ft (cm <sup>4</sup> /m)	in. <sup>3</sup> /ft (cm <sup>3</sup> /m)
PZC 13	27.88	12.56	0.375	0.375	14.82	50.4	353.0	56.2	6.10	5.60	6.38	21.7	152.0	24.2
	708	319	9.5	9.5	95.6	75.1	14,690	920	1.86	1.71	135.1	106.0	20,760	1,300
PZC 14	27.88	12.60	0.420	0.420	16.15	55.0	381.6	60.5	6.10	5.60	6.95	23.7	164.3	26.0
	708	320	10.7	10.7	104.2	81.8	15,890	990	1.86	1.71	147.2	115.5	22,440	1,400
PZC 18	25.00	15.25	0.375	0.375	14.82	50.4	532.2	69.8	6.10	5.60	7.12	24.2	255.5	33.5
	635	387	9.5	9.5	95.6	75.1	22,150	1,145	1.86	1.71	150.6	118.2	34,890	1,800
PZC 19	25.00	15.30	0.420	0.420	16.16	55.0	576.3	75.3	6.10	5.60	7.75	26.4	276.6	36.1
	635	388	10.7	10.7	104.2	81.8	23,990	1,235	1.86	1.71	164.1	128.8	37,780	1,945
PZC 25	27.88	17.66	0.485	0.560	20.40	69.4	938.7	106.3	6.65	6.15	8.78	29.9	404.1	45.7
	708	449	12.3	14.2	131.6	103.3	39,070	1,740	2.03	1.87	185.9	145.9	55,190	2,455
PZC 26	27.88	17.70	0.525	0.600	21.72	73.9	994.3	112.4	6.65	6.15	9.35	31.8	428.1	48.4
	708	450	13.3	15.2	140.1	110.0	41,390	1,840	2.03	1.87	197.9	155.4	58,460	2,600
PZC 28	27.88	17.75	0.570	0.645	23.22	79.0	1,057	119.1	6.65	6.15	10.00	34.0	455.1	51.3
	708	451	14.5	16.4	149.8	117.6	44,000	1,950	2.03	1.87	211.6	166.1	62,150	2,755
PZC 37	22.50	21.02	0.488	0.563	20.45	69.6	1,349	128.4	6.65	6.15	10.91	37.1	719.6	68.5
	572	534	12.4	14.3	132.0	103.6	56,160	2,100	2.03	1.87	230.9	181.2	98,270	3,680
PZC 39	22.50	21.05	0.525	0.600	21.76	74.0	1,429	135.6	6.65	6.15	11.61	39.5	762.1	72.3
	572	535	13.3	15.2	140.4	110.2	59,480	2,220	2.03	1.87	245.6	192.8	104,100	3,890
PZC 41	22.50	21.09	0.561	0.636	23.03	78.4	1,507	142.7	6.65	6.15	12.28	41.8	803.6	76.1
	572	536	14.2	16.2	148.6	116.6	62,720	2,340	2.03	1.87	260.0	204.1	109,700	4,090

\*Both sides of sheet; excludes socket interior and ball of interlock.

All listed dimensions are nominal. Due to rolling practices, variations in web and flange thickness is common. Permitted variations for such dimensions are not addressed.



# PS (FLAT SHEET) PILING PROPERTIES



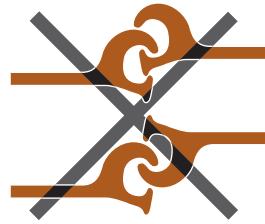
Section	Nominal Width	Depth (Height)	Wall Depth (Height)	Web Thickness	Per Single Section						Per Unit of Wall			
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	Area	Weight	Moment of Inertia	Section Modulus	Total Surface Area	Nominal Coating Area*	Area	Weight	Moment of Inertia	Section Modulus
					in. <sup>2</sup> (cm <sup>2</sup> )	lbs/ft (kg/m)	in. <sup>4</sup> (cm <sup>4</sup> )	in. <sup>3</sup> (cm <sup>3</sup> )	ft <sup>2</sup> /ft (m <sup>2</sup> /m)	ft <sup>2</sup> /ft (m <sup>2</sup> /m)	in. <sup>2</sup> /ft (cm <sup>2</sup> /m)	lbs/ft <sup>2</sup> (kg/m <sup>2</sup> )	in. <sup>4</sup> /ft (cm <sup>4</sup> /m)	in. <sup>3</sup> /ft (cm <sup>3</sup> /m)
PS 27.5	19.69	2.83	3.55	0.40	13.26	45.1	5.0	3.2	4.50	3.64	8.08	27.5	3.0	1.9
	500	72	90	10.2	85.5	67.1	207	52	1.37	1.11	171.0	134.2	414	103
PS 31	19.69	2.83	3.55	0.50	14.96	50.9	5.0	3.2	4.50	3.64	9.11	31.0	3.0	1.9
	500	72	90	12.7	96.5	75.7	207	52	1.37	1.11	192.9	151.4	414	103

\*Both sides of sheet; excludes interior of interlock.

All listed dimensions are nominal. Due to rolling practices, variations in web thickness is common. Permitted variations for such dimensions are not addressed.



Proper Interlock



Improper Interlock

Grade	Minimum Interlock Strength <sup>(1)</sup>	Minimum Swing <sup>(2)</sup>
A328	16 kips/in. (2,800 kN/m)	10 degrees
A572-50	20 kips/in. (3,500 kN/m)	10 degrees
A572-60	24 kips/in. (4,200 kN/m)	10 degrees

Higher interlock strengths are available; obtainable swing may be reduced in interlock strengths above 24 kips/in (4,200 kN/m).

- (1) These minimum ultimate interlock strengths assume proper interlocking of sheets. To verify the strength of PS Sheet Piling, consider both yielding of the web and failure of the interlock.
- (2) Swing reduces 1.5 degrees for each 10 feet (3 meters) in length over 70 feet (21 meters).

As a general rule, Gerdau advises against interlocking PS sections with other producers' section(s). Gerdau PS 27.5 and PS 31 can be interlocked together. PS and Z-Piling sections should not be interlocked together.