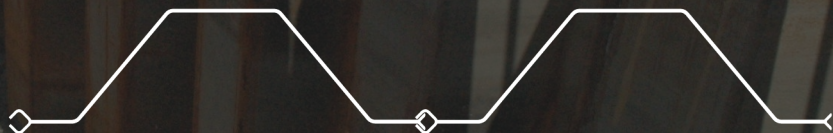




ESC-BP SERIES

WIDE U PROFILE SHEET PILES



A WIDE PROFILE SHEET PILE WITH A BOX INTERLOCKING CLUTCH FOR EASY GROUTING

Designed with an open clutch suitable for post installation grout sealing, the ESC-BP Series sheet pile is ideal for de-watering works, groundwater cutoff walls and pollution control situations. This pile with its light weight, wide profile and resulting in fewer clutches per unit length of wall provides an attractive commercial proposition for retaining walls and other applications.

ORDER OPTIONS

Steel Grades

- ✓ Q235B, Q345B, Q345C, Q390B, Q420B
- ✓ S235, S275JR, S355JR
- ✓ ASTM A572 Gr42, Gr50, Gr60
- ✓ Others available on request

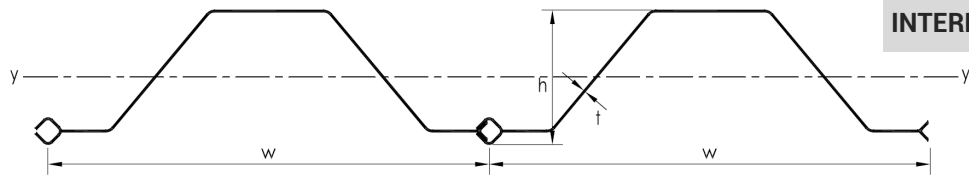
Length

- 46.0ft maximum
- Longer lengths can be spliced (>100ft possible)
- Any project specific length can be produced

Delivery Options

- ✓ Lifting Hole
- ✓ Grip Plate
- ✓ By container (38.7ft or less) or Break Bulk
- ✓ Corrosion Protection Coatings





INTERLOCKING CLUTCH

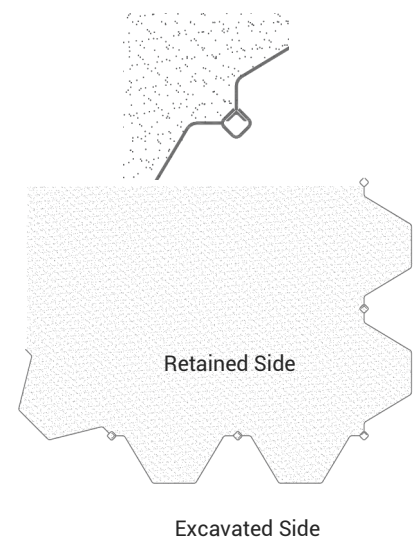
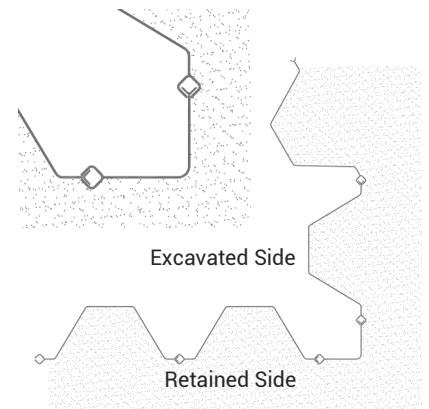


CLASSIFICATION

All sheet piles, excluding the -S Series are class 2 or 3 for grade S355 and below.
BP-S Series sheet piles are class 3 for S275 and below in accordance to EN 1993-5:2007. Contact engineering@escsteel.com if further detail is required

CORNER PILES

Due to the flexibility of the forming process, the ESC-BP Series Sheet Piles can be formed to almost any corner configuration, without requiring any wastage or welding. Note that the interlocks should be orientated toward the retained side as shown in the following figures.



Section	Width (w)	Height	Thickness t	Cross Sectional Area	Weight		Elastic Section Modulus	Moment of Inertia	Coating Area (both sides)
	in mm	in mm	in mm	in ² /ft cm ² /m	lb/ft kg/m	lb/ft ² kg/m ²	in ³ /ft cm ³ /m	in ⁴ /ft cm ⁴ /m	ft ² /ft m ² /m
ESC-6BP-S	41.85 1,063	11.46 291	0.23 5.75	4.33 91.8	51.48 76.60	14.77 72.10	11.16 600	66.80 9,150	9.35 2.85
ESC-7BP-S	40.79 1,036	12.64 321	0.23 5.75	4.45 94.2	51.48 76.60	15.13 73.90	13.02 700	82.78 11,340	9.35 2.85
ESC-8BP-S	39.45 1,002	13.86 352	0.23 5.75	4.60 97.4	51.48 76.60	15.65 76.40	14.88 800	101.47 13,900	9.35 2.85
ESC-9BP-S	37.44 951	14.65 372	0.23 5.75	4.84 102.6	51.48 76.60	16.51 80.60	16.74 900	121.25 16,610	9.35 2.85
ESC-10BP-S	35.55 903	15.31 389	0.23 5.75	5.10 108.1	51.48 76.60	17.39 84.90	18.60 1,000	140.53 19,250	9.35 2.85
ESC-11BP-S	33.54 852	15.91 404	0.23 5.75	5.40 114.5	51.48 76.60	18.41 89.90	20.46 1,100	161.55 22,130	9.35 2.85
ESC-12BP-S	31.73 806	16.34 415	0.23 5.75	5.71 121	51.48 76.60	19.46 95.00	22.32 1,200	181.48 24,860	9.35 2.85
ESC-13BP	48.58 1,234	17.44 443	0.31 7.75	5.54 117.4	72.37 107.69	17.88 87.30	24.74 1,330	206.01 28,220	11.38 3.47
ESC-14BP	47.44 1,205	17.95 456	0.31 7.75	5.67 120.2	72.37 107.69	18.31 89.40	26.04 1,400	224.04 30,690	11.38 3.47
ESC-15BP	45.98 1,168	18.50 470	0.31 7.75	5.85 124	72.37 107.69	19.93 97.30	27.90 1,500	247.84 33,950	11.38 3.47
ESC-16BP	44.49 1,130	19.06 484	0.31 7.75	6.05 128.2	72.37 107.69	19.52 95.30	29.76 1,600	273.09 37,410	11.38 3.47
ESC-17BP	42.91 1,090	19.61 498	0.31 7.75	6.27 132.8	72.37 107.69	20.23 98.80	31.81 1,710	299.96 41,090	11.38 3.47
ESC-18BP	41.65 1,058	20.00 508	0.31 7.75	6.46 136.9	72.37 107.69	20.85 101.80	33.48 1,800	322.59 44,190	11.38 3.47
ESC-19BP	40.35 1,025	20.35 517	0.31 7.75	6.67 141.3	72.37 107.69	21.52 105.10	35.15 1,890	346.39 47,450	11.38 3.47
ESC-20BP	57.87 1,470	20.59 523	0.38 9.75	6.56 138.9	107.65 160.20	22.32 109.00	37.01 1,990	359.01 49,180	13.48 4.11
ESC-21BP	56.54 1,436	21.18 538	0.38 9.75	6.71 142.1	107.65 160.20	22.86 111.60	39.06 2,100	389.97 53,420	13.48 4.11
ESC-22BP	55.16 1,401	21.73 552	0.38 9.75	6.88 145.7	107.65 160.20	23.43 114.40	41.11 2,210	422.45 57,870	13.48 4.11
ESC-23BP	54.09 1,374	22.13 562	0.38 9.75	7.01 148.5	107.65 160.20	23.88 116.60	42.78 2,300	447.86 61,350	13.48 4.11
ESC-24BP	53.03 1,347	22.48 571	0.38 9.75	7.15 151.5	107.65 160.20	24.35 118.90	44.45 2,390	474.06 64,940	13.48 4.11
ESC-25BP	51.57 1,310	22.99 584	0.38 9.75	7.35 155.8	107.65 160.20	25.05 122.30	46.87 2,520	510.56 69,940	13.48 4.11
ESC-26BP	50.43 1,281	23.35 593	0.38 9.75	7.52 159.3	107.65 160.20	25.60 125.00	48.55 2,610	539.03 73,840	13.48 4.11
ESC-27BP	49.29 1,252	23.66 601	0.38 9.75	7.69 163	107.65 160.20	26.19 127.90	50.59 2,720	568.52 77,880	13.48 4.11
ESC-28BP	48.15 1,223	23.98 609	0.38 9.75	7.88 166.9	107.65 160.20	26.83 131.00	52.45 2,820	599.11 82,070	13.48 4.11
ESC-29BP	47.36 1,203	24.17 614	0.38 9.75	8.01 169.6	107.65 160.20	27.28 133.20	53.94 2,900	620.06 84,940	13.48 4.11
ESC-30BP	46.18 1,173	24.49 622	0.38 9.75	8.21 174	107.65 160.20	27.98 136.60	55.99 3,010	652.55 89,390	13.48 4.11
ESC-31BP	51.30 1,303	22.01 559	0.46 11.75	8.88 188.1	129.25 192.33	30.23 147.60	57.47 3,090	589.48 80,750	13.48 4.11
ESC-32BP	50.24 1,276	22.28 566	0.46 11.75	9.07 192.1	129.25 192.33	30.88 150.80	59.52 3,200	619.04 84,800	13.48 4.11
ESC-34BP	48.43 1,230	22.76 578	0.46 11.75	9.40 199.2	129.25 192.33	32.03 156.40	63.05 3,390	670.21 91,810	13.48 4.11
ESC-36BP	46.57 1,183	23.15 588	0.46 11.75	9.77 207	129.25 192.33	33.28 162.50	66.77 3,590	723.80 99,150	13.48 4.11
ESC-38BP	44.72 1,136	23.50 597	0.46 11.75	10.18 215.7	129.25 192.33	34.67 169.30	70.87 3,810	780.01 106,850	13.48 4.11
ESC-40BP	43.19 1,097	23.78 604	0.46 11.75	10.54 223.3	129.25 192.33	35.90 175.30	74.21 3,990	827.02 113,290	13.48 4.11
ESC-42BP	54.37 1,381	26.14 664	0.55 14.00	10.82 229.2	166.90 248.36	36.84 179.90	78.49 4,220	967.47 132,530	14.89 4.54
ESC-44BP	53.07 1,348	26.46 672	0.55 14.00	11.08 234.7	166.90 248.36	37.72 184.20	81.47 4,380	1018.28 139,490	14.89 4.54
ESC-46BP	51.34 1,304	26.89 683	0.55 14.00	11.45 242.6	166.90 248.36	38.99 190.40	85.75 4,610	1088.94 149,170	14.89 4.54
ESC-48BP	50.04 1,271	27.20 691	0.55 14.00	11.75 248.9	166.90 248.36	40.02 195.40	88.91 4,780	1144.13 156,730	14.89 4.54
ESC-50BP	48.27 1,226	27.56 700	0.55 14.00	12.18 258.1	166.90 248.36	41.49 202.60	93.56 5,030	1220.93 167,250	14.89 4.54

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STEEL GRADES & MANUFACTURING TOLERANCES

COLD ROLLED & COLD FORMED SHEET PILES

STEEL GRADES

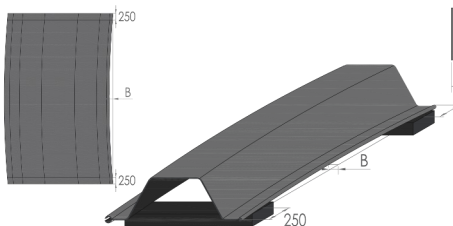
Classification		Mechanical Properties							Chemical Composition % (max)					
		Minimum Yield Point				Ultimate Tensile Strength		Elongation % (min) 0.118" < t < 1.57" / 3 ≤ t ≤ 40	Impact Strength (Charpy)	C	Si	Mn	P	S
		ksi / MPa												
		t < 0.63" / t ≤ 16mm	0.63" < t < 1.57" / 16mm < t ≤ 40mm		ksi / MPa									
BS EN 10025-2: 2004	S275JR	40	275	38	265	59-81	410-560	23	27J at 20°C	0.21	-	1.50	0.035	0.035
	S275J2	40	275	38	265	59-81	410-560	21	27J at -20°C	0.18	-	1.50	0.025	0.025
	S355JR	51	355	50	345	68-91	470-630	22	27J at 20°C	0.24	0.55	1.60	0.035	0.035
BS EN 102481: 1998	S390GP	57	390	57	390	≥ 71	≥ 490	20	-	0.24	0.55	1.60	0.04	0.040
	S430GP	62	430	62	430	≥ 74	≥ 510	19	-	0.24	0.55	1.60	0.04	0.040
GB/T 700:2006	Q235B	34	235	33	225	54-73	375-500	26	27J at 20°C	0.20	0.35	1.40	0.045	0.045
	Q275B	40	275	38	265	59-78	410-540	22	27J at 20°C	0.21	0.35	1.50	0.045	0.045
GB/T1591:2008	Q345B	50	345	49	335	68-91	470-630	20	34J at 20°C	0.20	0.50	1.70	0.035	0.035
	Q390B	57	390	54	370	71-94	490-650	20	34J at 20°C	0.20	0.50	1.70	0.030	0.030
	Q420B	61	420	58	400	78-99	540-680	19	34J at 20°C	0.20	0.50	1.70	0.030	0.030
	MDB350	51	350	51	350	68-91	470-630	21	40J at 20°C	0.20	0.50	1.50	0.025	0.020
ASTMA36-14	A36	36	250	36	250	58-80	400-550	23	-	0.26	0.40	-	0.040	0.050
ASTM A572-2013a	A572 Gr.42	42	290	42	290	≥ 60	≥ 415	20	-	0.21	0.40	1.35	0.040	0.050
	A572 Gr.50	50	345	50	345	≥ 65	≥ 450	18	-	0.23	0.40	1.30	0.040	0.050
	A572 Gr.60	60	413	60	413	≥ 75	≥ 517	16	-	0.26	0.40	1.35	0.040	0.050
ASTM A690-2013a	A690	50	345	50	345	≥ 70	>485	21	-	0.22	0.40	0.60-0.90	0.08-0.015	0.040
JIS G3101-2010	SS400	36	245	34	235	58-74	400-510	17 (5<t<16), 21 (t<5 or t>16)	-	-	-	-	0.050	0.050
	SS490	41	285	40	275	71-88	490-610	15 (5<t<16), 19 (t<5 or t>16)	-	-	-	-	0.050	0.050
	SS540	58	400	48	330	≥ 78	≥ 540	13 (5<t<16), 16 (t<5 or t>16)	-	0.30	-	1.60	0.040	0.040
JIS A5523-2012	SYW295	43	295	43	295	≥ 71	≥ 490	17	43J at 0°C	0.18	0.55	1.50	0.040	0.040
	SYW390	57	390	57	390	≥ 78	≥ 540	15	43J at 0°C	0.18	0.55	1.50	0.040	0.040
MS 2025-1:2006	S235JR	34	235	33	225	52-74	360-510	26	-	0.17	-	1.40	0.035	0.035
	S275JR	40	275	38	265	59-81	410-560	23	-	0.21	-	1.50	0.035	0.035
	S355JO	51	355	50	345	68-91	470-630	22	-	0.20	0.55	1.60	0.030	0.030

MANUFACTURING TOLERANCES TO BS EN 10249

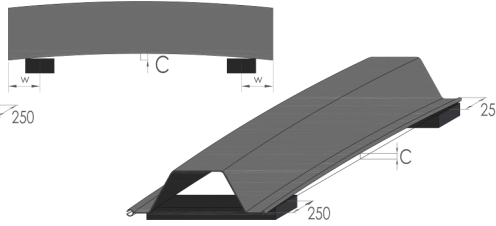
Component	Tolerance
Mass	± 5%
Length	± 2.0" / 50mm
Height (≤ 7.87" / 200mm)	± 0.157" / 4.0mm
Height (> 7.87" / 200mm & ≤ 11.8" / 300mm)	± 0.236" / 6.0mm
Height (> 11.8" / 300mm & ≤ 15.8" / 400mm)	± 0.315" / 8.0mm
Height (> 15.8" / 400mm)	± 0.394" / 10.0mm
Width of Single Pile	± 2% of width
Width of Double Z or Wide U	± 3% of width
Squareness of Ends	2% of width

Nominal Thickness	Tolerance
0.197" / 5mm	± 0.0114" / 0.29mm
0.236" / 6mm	± 0.0122" / 0.31mm
0.315" / 8mm	± 0.0138" / 0.35mm
0.354" / 9mm	± 0.0157" / 0.40mm
0.393" / 10mm	± 0.0157" / 0.40mm
0.472" / 12mm	± 0.0169" / 0.43mm
0.512" / 13mm	± 0.0181" / 0.46mm
0.591" / 15mm	± 0.0181" / 0.46mm

Bending B
±0.2% of the length



Curving C
±0.2% of the length



Twisting T
±0.2% of the length but no more than 4" / 100mm

