



ESC-BP SERIES

WIDE U PROFILE SHEET PILES

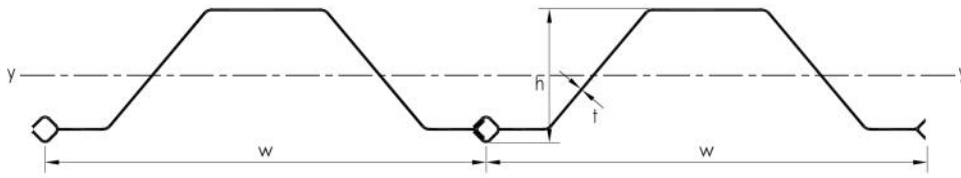
A WIDE PROFILE SHEET PILE WITH BOX CLUTCH FOR EASY GROUTING

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 resulting in fewer clutches per unit length of wall provides an attractive commercial proposition for retaining walls and other applications.

ORDER OPTIONS

Steel Grades	<ul style="list-style-type: none"> ✓ Q235B, Q345B, Q345C, Q390B, Q420B ✓ S235, S275JR, S355JR ✓ ASTM A572 Gr42, Gr50, Gr60 ✓ Others available on request
Length	<ul style="list-style-type: none"> 14.0m maximum Longer lengths can be spliced (>30m possible) Any project specific length can be produced
Delivery Options	<ul style="list-style-type: none"> ✓ Lifting Hole ✓ Grip Plate ✓ By container (11.8m or less) or Break Bulk ✓ Corrosion Protection Coatings





INTERLOCKING CLUTCH



*excludes internal section of interlock

Section	Width	Height	Thickness	Cross Sectional Area	Weight		Elastic Section Modulus	Moment of Inertia	Coating Area*(both sides)
	(w)	(h)	(t)		Per Pile	Per Wall			
	mm	mm	mm	cm ² /m	kg/m	kg/m ²	cm ³ /m	cm ⁴ /m	m ² /m
ESC-6BP-S	1,063	291	5.75	91.8	76.60	72.1	600	9,150	2.85
ESC-7BP-S	1,036	321	5.75	94.2	76.60	73.9	700	11,340	2.85
ESC-8BP-S	1,002	352	5.75	97.4	76.60	76.4	800	13,900	2.85
ESC-9BP-S	951	372	5.75	102.6	76.60	80.6	900	16,610	2.85
ESC-10BP-S	903	389	5.75	108.1	76.60	84.9	1,000	19,250	2.85
ESC-11BP-S	852	404	5.75	114.5	76.60	89.9	1,100	22,130	2.85
ESC-12BP-S	806	415	5.75	121.0	76.60	95.0	1,200	24,860	2.85
ESC-13BP	1,234	443	7.75	117.4	107.69	87.3	1,330	28,220	3.47
ESC-13BP-S	759	425	5.75	128.5	76.60	100.9	1,310	27,820	2.85
ESC-14BP	1,205	456	7.75	120.2	107.69	89.4	1,400	30,690	3.47
ESC-14BP-S	718	433	5.75	135.9	76.60	106.6	1,410	30,550	2.85
ESC-15BP	1,168	470	7.75	124.0	107.69	97.3	1,500	33,950	3.47
ESC-16BP-S	1,448	539	7.75	116.0	126.30	87.2	1,610	41,080	4.07
ESC-16BP	1,130	484	7.75	128.2	107.69	95.3	1,600	37,410	3.47
ESC-17BP	1,090	498	7.75	132.8	107.69	98.8	1,710	41,090	3.47
ESC-18BP-S	1,376	569	7.75	122.1	126.30	91.8	1,790	48,590	4.07
ESC-18BP	1,058	508	7.75	136.9	107.69	101.8	1,800	44,190	3.47
ESC-19BP	1,025	517	7.75	141.3	107.69	105.1	1,890	47,450	3.47
ESC-20BP-S	1,300	597	7.75	129.2	126.30	97.2	2,000	56,920	4.07
ESC-20BP	1,470	523	9.75	138.9	160.20	109.0	1,990	49,180	4.11
ESC-21BP	1,436	538	9.75	142.1	160.20	111.6	2,100	53,420	4.11
ESC-21BP	957	534	7.75	151.3	107.69	118.8	2,100	54,480	3.47
ESC-22BP-S	1,231	619	7.75	136.5	126.30	102.6	2,190	64,940	4.07
ESC-22BP	1,401	552	9.75	145.7	160.20	114.4	2,210	57,870	4.11
ESC-23BP	1,374	562	9.75	148.5	160.20	116.6	2,300	61,350	4.11
ESC-23BP	896	547	7.75	161.7	107.69	112.5	2,300	61,260	3.47
ESC-24BP-S	1,159	639	7.75	145.0	126.30	109.0	2,410	73,760	4.07
ESC-24BP	1,347	571	9.75	151.5	160.20	118.9	2,390	64,940	4.11
ESC-25BP	1,310	584	9.75	155.8	160.20	122.3	2,520	69,940	4.11
ESC-26BP	1,281	593	9.75	159.3	160.20	125.0	2,610	73,840	4.11
ESC-27BP	1,252	601	9.75	163.0	160.20	127.9	2,720	77,880	4.11
ESC-28BP	1,223	609	9.75	166.9	160.20	131.0	2,820	82,070	4.11
ESC-29BP	1,203	614	9.75	169.6	160.20	133.2	2,900	84,940	4.11
ESC-30BP	1,173	622	9.75	174.0	160.20	136.6	3,010	89,390	4.11
ESC-31BP	1,303	559	11.75	188.1	192.33	147.6	3,090	80,750	4.11
ESC-32BP	1,276	566	11.75	192.1	192.33	150.8	3,200	84,800	4.11
ESC-34BP	1,230	578	11.75	199.2	192.33	156.4	3,390	91,810	4.11
ESC-36BP	1,183	588	11.75	207.0	192.33	162.5	3,590	99,150	4.11
ESC-38BP	1,136	597	11.75	215.7	192.33	169.3	3,810	106,850	4.11
ESC-40BP	1,097	604	11.75	223.3	192.33	175.3	3,990	113,290	4.11
ESC-42BP	1,381	664	14.0	229.2	248.36	179.9	4,220	132,530	4.54
ESC-44BP	1,348	672	14.0	234.7	248.36	184.2	4,380	139,490	4.54
ESC-46BP	1,304	683	14.0	242.6	248.36	190.4	4,610	149,170	4.54
ESC-48BP	1,271	691	14.0	248.9	248.36	195.4	4,780	156,730	4.54
ESC-50BP	1,226	700	14.0	258.1	248.36	202.6	5,030	167,250	4.54

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@escpile.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.



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)	Impact Strength (Charpy)	C	Si	Mn	P	S
		t ≤ 16	16 < t ≤ 40								
BS EN 10025-2: 2004	S275JR	275	265	410-560	23	27J at 20°C	0.21	-	1.50	0.035	0.035
	S275J2	275	265	410-560	21	27J at -20°C	0.18	-	1.50	0.025	0.025
	S355JR	355	345	470-630	22	27J at 20°C	0.24	0.55	1.60	0.035	0.035
BS EN 102481: 1998	S390GP	390	390	≥ 490	20	-	0.24	0.55	1.60	0.04	0.040
	S430GP	430	430	≥ 510	19	-	0.24	0.55	1.60	0.04	0.040
GB/T 700:2006	Q235B	235	225	375-500	26	27J at 20°C	0.20	0.35	1.40	0.045	0.045
	Q275B	275	265	410-540	22	27J at 20°C	0.21	0.35	1.50	0.045	0.045
GB/T 1591:2008	Q345B	345	335	470-630	20	34J at 20°C	0.20	0.50	1.70	0.035	0.035
	Q390B	390	370	490-650	20	34J at 20°C	0.20	0.50	1.70	0.030	0.030
	Q420B	420	400	540-680	19	34J at 20°C	0.20	0.50	1.70	0.030	0.030
	MDB350	350	350	470-630	21	40J at 20°C	0.20	0.50	1.50	0.025	0.020
ASTMA36-14	A36	250	250	400-550	23	-	0.26	0.40	-	0.040	0.050
ASTM A572-2013a	A572 Gr.42	290	290	≥ 415	20	-	0.21	0.40	1.35	0.040	0.050
	A572 Gr.50	345	345	≥ 450	18	-	0.23	0.40	1.30	0.040	0.050
	A572 Gr.60	413	413	≥ 517	16	-	0.26	0.40	1.35	0.040	0.050
ASTM A690-2013a	A690	345	345	> 485	21	-	0.22	0.40	0.60-0.90	0.08-.015	0.040
JIS G3101-2010	SS400	245	235	400-510	17 (5 < t < 16), 21 (t ≤ 5 or t > 16)	-	-	-	-	0.050	0.050
	SS490	285	275	490-610	15 (5 < t < 16), 19 (t ≤ 5 or t > 16)	-	-	-	-	0.050	0.050
	SS540	400	330	≥ 540	13 (5 < t < 16), 16 (t ≤ 5 or t > 16)	-	0.30	-	1.60	0.040	0.040
JIS A5523-2012	SYW295	295	295	≥ 490	17	43J at 0°C	0.18	0.55	1.50	0.040	0.040
	SYW390	390	390	≥ 540	15	43J at 0°C	0.18	0.55	1.50	0.040	0.040
MS 2025-1:2006	S235JR	235	225	360-510	26	-	0.17	-	1.40	0.035	0.035
	S275JR	275	265	410-560	23	-	0.21	-	1.50	0.035	0.035
	S355JO	355	345	470-630	22	-	0.20	0.55	1.60	0.030	0.030

MANUFACTURING TOLERANCES TO BS EN 10249

Component	Tolerance	Nominal Thickness	Tolerance
Mass	± 5%		
Length	± 50mm		
Height (≤ 200mm)	± 4.0mm	5mm	± 0.29mm
Height (> 200mm & ≤ 300mm)	± 6.0mm	6mm	± 0.31mm
Height (> 300mm & ≤ 400mm)	± 8.0mm	8mm	± 0.35mm
Height (> 400mm)	± 10.0mm	9mm	± 0.40mm
Width of Single Pile	± 2% of width	10mm	± 0.40mm
Width of Double Z or Wide U	± 3% of width	12mm	± 0.43mm
Squareness of Ends	2% of width	13mm	± 0.46mm
		15mm	± 0.46mm

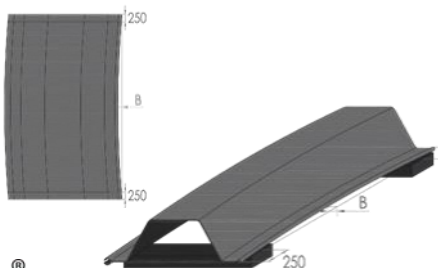
SHEET PILE MARKING

ESC is able to apply adhesive stickers to its products to provide useful information such as destination, order number, project identifier, client name and others. To enable good traceability, material heat number & pile specification is included as standard.

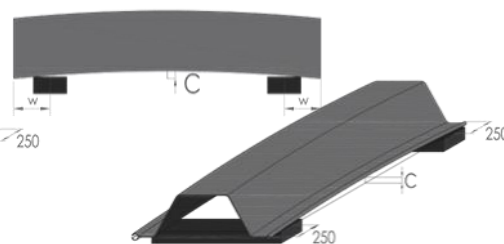


Bending B

±0.2% of the length



Curving C



Twisting T

±0.2% of the length but no more than 100mm

