ESC-CRM SERIES

WIDE U PROFILE SHEET PILES

WIDE PROFILE 900MM WIDTH COLD ROLLED SHEET PILE

Within ESC's cold rolled sheet pile portfolio is the ESC-CRM Series. The design features a 900mm Wide U Sheet Pile. The flange and track have a rolled dimple which improves the stiffness of the profile, improving driveability. A wide range of steel grades are available to cater to various international standards and project codes. Featuring more than 30% fewer interlocks versus standard U sheet pile walls improves overall seepage characteristics of the installed sheet pile wall.

ORDER OPTIONS

Steel Grades	✓ Q235B, Q345B, Q345C, Q390B, Q420B ✓ S235, S275JR, S355JR ✓ ASTM A572 Gr42, Gr50, Gr60 ✓ Others available on request
Length	78.7ft maximum 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

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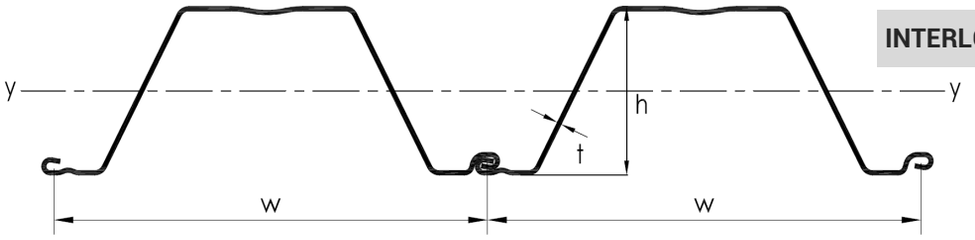
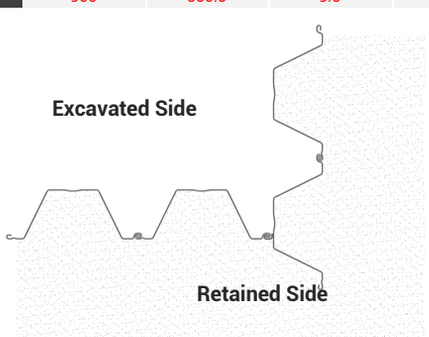
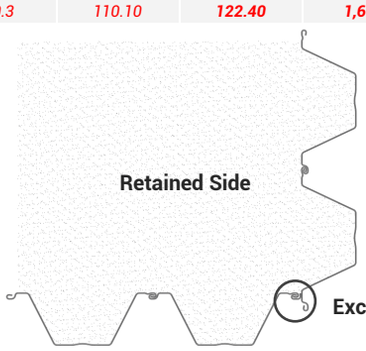


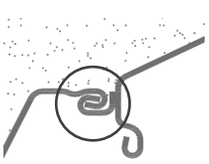
INTERLOCKING CLUTCH

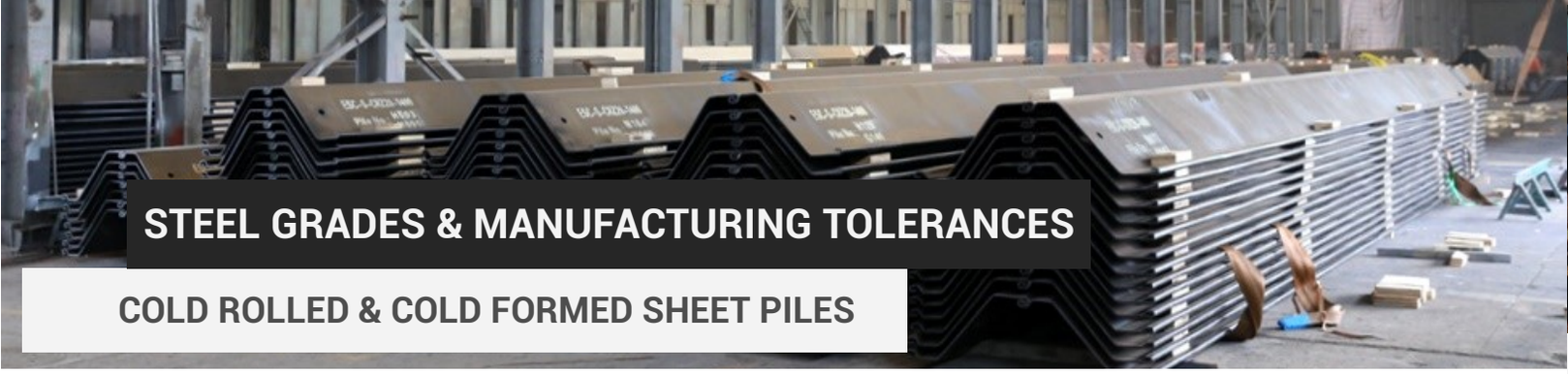
Section	Width (w)	Height	Thickness t	Cross Sectional Area	Weight		Elastic Section Modulus	Moment of Inertia	Coating Area (both side per pile)
					Per Pile	Per Wall			
	in	in	in	in²/ft	lb/ft	lb/ft²	in³/ft	in⁴/ft	ft²/ft
	mm	*mm*	*mm*	*cm²/m*	*kg/m*	*kg/m²*	*cm³/m*	*cm⁴/m*	*m²/m*
ESC-CRM9-900	35.43	12.11	0.22	3.64	40.72	13.80	15.16	91.50	9.22
	900	*307.5*	*5.5*	*77.2*	*60.60*	***67.40***	***815***	*12,534*	*2.81*
ESC-CRM9-900A	35.43	12.13	0.24	3.98	44.42	15.05	16.52	99.82	9.22
	900	*308*	*6.0*	*84.3*	*66.10*	***73.50***	***888***	*13,674*	*2.81*
ESC-CRM9-900B	35.43	12.15	0.26	4.31	48.18	16.30	17.87	108.15	9.22
	900	*308.5*	*6.5*	*91.3*	*71.70*	***79.60***	***961***	*14,815*	*2.81*
ESC-CRM10-900	35.43	12.17	0.28	4.64	51.88	17.55	19.21	116.47	9.22
	900	*309*	*7.0*	*98.3*	*77.20*	***85.70***	***1,033***	*15,955*	*2.81*
ESC-CRM11-900	35.43	12.19	0.30	4.97	55.57	18.82	20.55	124.79	9.22
	900	*309.5*	*7.5*	*105.3*	*82.70*	***91.90***	***1,105***	*17,095*	*2.81*
ESC-CRM11-900A	35.43	12.20	0.31	5.30	59.27	20.07	21.89	133.12	9.22
	900	*310*	*8.0*	*112.3*	*88.20*	***98.00***	***1,177***	*18,236*	*2.81*
ESC-CRM11-900B	35.43	13.68	0.26	4.53	51.27	17.14	20.59	140.36	9.71
	900	*347.5*	*6.5*	*96*	*76.30*	***83.70***	***1,107***	*19,227*	*2.96*
ESC-CRM11-900C	35.43	13.70	0.28	4.88	54.50	18.47	22.13	151.16	9.71
	900	*348*	*7.0*	*103.4*	*81.10*	***90.20***	***1,190***	*20,707*	*2.96*
ESC-CRM12-900	35.43	12.22	0.33	5.64	62.97	21.32	23.21	141.45	9.22
	900	*310.5*	*8.5*	*119.4*	*93.70*	***104.10***	***1,248***	*19,377*	*2.81*
ESC-CRM12-900A	35.43	13.72	0.30	5.23	58.40	19.78	23.68	161.97	9.71
	900	*348.5*	*7.5*	*110.8*	*86.90*	***96.60***	***1,273***	*22,187*	*2.96*
ESC-CRM13-900	35.43	13.74	0.31	5.57	62.29	21.09	25.22	172.77	9.71
	900	*349*	*8.0*	*118.1*	*92.70*	***103.00***	***1,356***	*23,667*	*2.96*
ESC-CRM14-900	35.43	13.76	0.33	5.92	66.19	22.43	26.77	183.58	9.71
	900	*349.5*	*8.5*	*125.5*	*98.50*	***109.50***	***1,439***	*25,148*	*2.96*
ESC-CRM15-900	35.43	13.78	0.35	6.27	70.09	23.74	28.31	194.38	9.71
	900	*350*	*9.0*	*132.9*	*104.30*	***115.90***	***1,522***	*26,628*	*2.96*
ESC-CRM16-900	35.43	13.80	0.37	6.62	73.99	25.07	29.83	205.20	9.71
	900	*350.5*	*9.5*	*140.3*	*110.10*	***122.40***	***1,604***	*28,110*	*2.96*

CORNER PILES









STEEL GRADES & MANUFACTURING TOLERANCES

COLD ROLLED & COLD FORMED SHEET PILES

STEEL GRADES

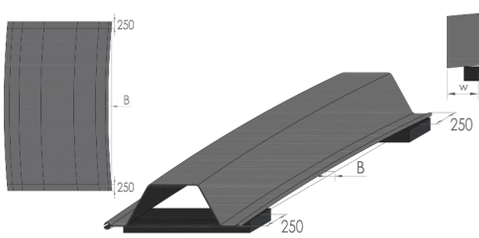
Classification		Mechanical Properties: Minimum Yield Point ksi / MPa t<0.63" / t≤16mm		Minimum Yield Point ksi / MPa 0.63"<t<1.57" / 16mm<t≤ 40mm		Ultimate Tensile Strength ksi / MPa		Elongation % (min) 0.118"<t<1.57" / 3≤t≤40	Impact Strength (Charpy)	Chemical Composition % (max) C	Si	Mn	P	S
BS EN 10025-2: 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-.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

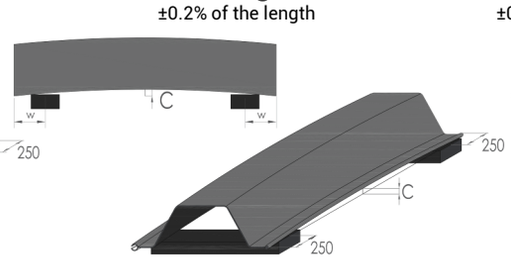
Component	Tolerance
Mass	± 5%
Length	± 2.0" / *50mm*
Height (≤ 7.87" / *200mm*)	± 0.157" / *4.0mm*
Height (> 7.87" / *200mm* & ≤ 11.8" / *300mm*)	± 0.236" / *6.0mm*
Height (> 11.8" / *300mm* & ≤ 15.8" / *400mm*)	± 0.315" / *8.0mm*
Height (> 15.8" / *400mm*)	± 0.394" / *10.0mm*
Width of Single Pile	± 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*

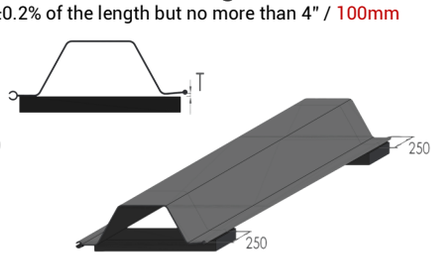
Bending B
±0.2% of the length



Curving C
±0.2% of the length



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



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