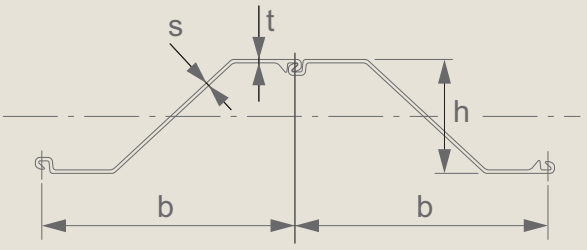
Steel Sheet Piling

AZ 13-700

STEEL SHEET PILING • 100 YEARS • MADE IN LUXEMBOURG •

ArcelorMittal



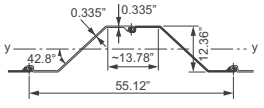
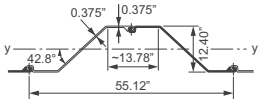
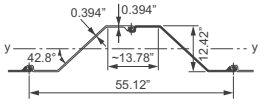
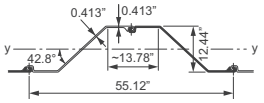
The **new AZ 13-700** will complete the AZ-700 range with 700 mm (27.56") wide steel sheet piles manufactured by ArcelorMittal. It represents the excellent compromise of steel thickness (3/8") and profile width (27.56") for a sheet pile with an elastic section modulus of 24.3 in³/ft. Similarly to other profiles, it can be rolled in various thicknesses and is available in steel grades S 240 GP up to S 430 GP according to EN 10248, as well as the mill specification S 460 AP and ASTM steel grades. Maximum rolling length is 101.7 ft.

Shipments of this new section will start before the end of 2012. For further information, feel free to contact our sales and technical department in our local sales agencies or in our headquarters in Luxembourg.

Section	Width b	Height h	Thickness t	Thickness s	Sectional area	Mass		Moment of inertia	Elastic section modulus	Static moment	Plastic section modulus	Class*						
	in	in	in	in	in²/ft	lb/ft single pile	lb/ft² wall	in⁴/ft	in³/ft	in³/ft	in³/ft	S 240 GP	S 270 GP	S 320 GP	S 355 GP	S 390 GP	S 430 GP	S 460 AP
AZ 12-700	27.56	12.36	0.335	0.335	5.82	45.49	**19.81**	138.3	**22.4**	13.2	26.3	**2**	**2**	**3**	**3**	**3**	**3**	**3**
AZ 13-700	27.56	12.40	0.375	0.375	6.36	49.72	**21.65**	150.4	**24.3**	14.3	28.6	**2**	**2**	**2**	**3**	**3**	**3**	**3**
AZ 13-700-10/10	27.56	12.42	0.394	0.394	6.63	51.85	**22.58**	156.5	**25.2**	14.9	29.8	**2**	**2**	**2**	**2**	**3**	**3**	**3**
AZ 14-700	27.56	12.44	0.413	0.413	6.90	53.96	**23.50**	162.5	**26.1**	15.5	31.0	**2**	**2**	**2**	**2**	**2**	**3**	**3**

* Classification according to EN 1993-5. Class 1 is obtained by verification of the rotation capacity for a class-2 cross-section.
Steel grade S 460 AP following specification of the mill and ASTM A 690 are available on request.

Section properties

Section		S = Single pile D = Double pile	Sectional area	Mass	Moment of inertia	Elastic section modulus	Radius of gyration	Coating area*
			in²	lb/ft	in⁴	in³	in	ft²/ft
AZ 12-700		Per S	13.37	**45.49**	317.6	**51.3**	4.87	2.81
		Per D	26.73	**90.97**	635.2	**102.8**	4.87	5.61
		Per ft of wall	5.82	**19.81**	138.3	**22.4**	4.87	1.22
AZ 13-700		Per S	14.61	**49.72**	345.2	**55.5**	4.86	2.81
		Per D	29.22	**99.45**	690.7	**111.4**	4.86	5.61
		Per ft of wall	6.36	**21.65**	150.4	**24.3**	4.86	1.22
AZ 13-700-10/10		Per S	15.24	**51.85**	359.4	**57.7**	4.86	2.81
		Per D	30.47	**103.71**	718.6	**115.6**	4.86	5.61
		Per ft of wall	6.63	**22.58**	156.5	**25.2**	4.86	1.22
AZ 14-700		Per S	15.86	**53.96**	373.1	**59.8**	4.85	2.81
		Per D	31.71	**107.93**	746.2	**119.9**	4.85	5.61
		Per ft of wall	6.90	**23.50**	162.5	**26.1**	4.85	1.22

* One side, excluding inside of interlocks

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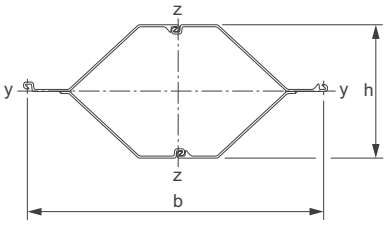

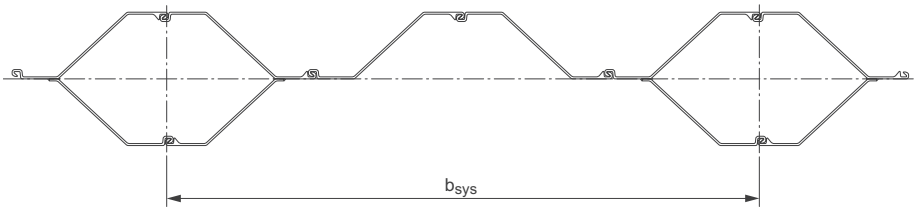

CAZ Box pile

Section	Width b	Height h	Perimeter	Sectional area	Total section	Mass*	Moment of inertia		Elastic section modulus		Min. radius of gyration	Coating area**
							y - y	z - z	y - y	z - z		
	in	in	in	in^2	in^2	lb/ft	in^4	in^4	in^3	in^3	in	ft^2/ft
CAZ 12-700	55.12	24.72	141.92	46.96	701.30	**159.80**	3 309.9	10 128.9	**266.4**	353.0	8.39	11.1
CAZ 13-700	55.12	24.80	142.12	51.50	705.51	**175.25**	3 625.1	11 080.6	**290.8**	386.6	8.39	11.1
CAZ 13-700-10/10	55.12	24.84	142.22	53.78	707.62	**183.01**	3 784.7	11 558.2	**303.0**	403.4	8.39	11.1
CAZ 14-700	55.12	24.88	142.32	56.04	709.73	**190.71**	3 943.2	12 032.2	**315.2**	420.2	8.39	11.1

* The mass of the welds is not taken into account
** Outside surface, excluding inside of interlocks

Combined wall: CAZ box piles / AZ sheet piles

Section	System width	$Mass_{100}$*	$Mass_{60}$*	Moment of inertia	Elastic section modulus
	b_{sys}			I_{sys}	W_{sys}
	in	lb/ft^2	lb/ft^2	in^4/ft	in^3/ft
CAZ 13-700 / AZ 13-700	110.24	**29.90**	25.58	469.8	**37.7**
CAZ 13-700-10/10 / AZ 13-700	110.24	**30.74**	26.42	487.2	**39.1**
CAZ 14-700 / AZ 13-700	110.24	**31.58**	27.26	504.5	**40.4**

* $Mass_{100}$: L_{AZ} = 100% $L_{box\ pile}$; $Mass_{60}$: L_{AZ} = 60% $L_{box\ pile}$

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