

Corrugated Steel Pipe



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Atlantic Industries Limited
We Support You.



Galvanized Steel Pipe

Atlantic Industries Limited (AIL) Galvanized Steel Pipe (CSP) products have a long history of proven service performance for storm sewer, highway construction and forestry applications.

Long Service Life

The galvanized surface on our CSP products provides a highly effective and economical protective coating which ensures a long service life of the basic steel structures.

Corrugated steel pipe systems offer extremely low infiltration and exfiltrations rates.

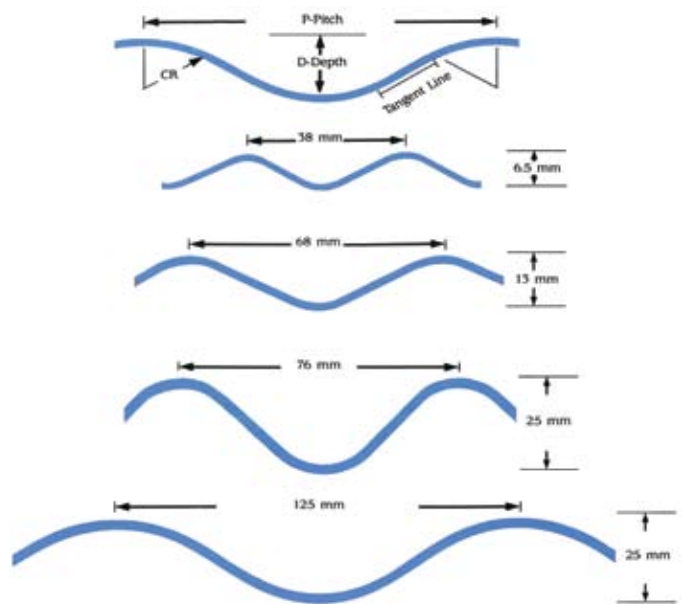
Wall Thicknesses and Profiles

AIL's corrugated steel pipe comes in a variety of corrugation profiles and thicknesses to meet a wide range of structural design applications. CSP thicknesses are 1.3mm, 1.6mm, 2.0mm, 2.8mm and 3.5mm.

Corrugation profiles available are 38 X 6.5mm, 68 X 13mm, 76 X 25mm and 125 X 25mm which can be ordered in various sizes and thicknesses from the accompanying table.

AIL's CSP is available in 6 metre to 15 metre custom lengths.

STANDARD CORRUGATION PROFILES





Strength and Durability

AIL's CSP will not crack under impact loads or vibrations due to the inherent strength of steel and the flexibility of the corrugated pipe section. The high ring compression of the steel pipe absorbs and transfers live and dead loads to the surrounding soil around the entire circumference. The beam strength of the pipe section maintains the grade and line of the structure by bridging inequalities of the trench bottom and sidefill. These characteristics ensure that the conduit has a superior ability to maintain the hydraulic properties and capacity for which it was designed.

Coupling Systems

CSP pipe sections are coupled to prevent deflection and offsetting at the joint. This ensures a smooth flow across the sections and results in excellent flow capacities throughout the service life of the system.

AIL manufactures couplers of three basic designs; full corrugated or annular coupler, dimple coupler and simple flat band coupler for smaller diameters. The choice of a coupling system is dependent upon the degree of positive jointing and/or watertightness desired.

Various types of joint sealants and rubber gaskets can be used with CSP connections to enhance the watertightness of the joints. Information on these other types of joint sealants is available upon request.

Shapes

AIL's corrugated steel pipe can be supplied in round pipe, which is suitable for most applications, or in a pipe-arch when the height of fill conditions are restrictive.

The pipe-arch design distributes the cross-sectional area of the pipe horizontally to allow for limited head room without any significant reduction in capacity. In addition, the pipe-arch can handle larger volumes of water at lower levels of flow.

More information on pipe-arches is available by contacting your nearest AIL sales office.

Coatings

CSP is available in a choice of three coatings to suit your project requirements.

- Galvanized CSP – A 50 year service life in a low abrasion environment with a pH between 6 and 10, resistivity between 2,000 and 10,000 ohm-cm and CaCO₃ (hardness) levels above 50ppm. Service life increases with additional hardness of the water.
- Aluminized Type 2 CSP – A 75 year service life in a low abrasion environment with a pH between 5 and 9, resistivity above 1,500 ohm-cm. CaCO₃ (hardness) levels do not affect service life.
- Polymer Laminated CSP – Over 100 years service life in corrosive and moderately abrasive environments with a pH between 5 and 9 and resistivity over 1,500 ohm-cm. CaCO₃ (hardness) levels do not affect service life.

Suitability of coating can be determined by a simple test and details are available from your AIL Technical Representative.

Standard and Special Fittings

Standard CSP fittings such as tees, elbows, wyes, reducers and saddle branches are offered for the full range of pipe sizes to meet any normal design criteria. In addition to the standard line of CSP fittings, special fittings including manholes and catch basins are also readily available and can be fabricated for special applications.

Technical Support

Our technical sales representatives can provide on-site engineering evaluation and recommendations should you require them. Service and experience are two things you can count on from AIL.

AIL corrugated steel pipe products are manufactured to exacting standards and have been proven reliable through a broad range of service applications.

Meets CSA G401-07 standards.



HELICAL PIPE AVAILABILITY WEIGHTS AND FILL HEIGHT TABLE

CORR PROFILE mm DIAMETER	END AREA m ²			WEIGHT kg/m THICKNESS IN MILLIMETERS				MAX COVER IN METERS				MIN COVER IN IN MILLIMETERS	
								THICKNESS IN MILLIMETERS				CL-625 VEHICLE	E-80 VEHICLE
								1.6	2.0	2.8	3.5		
150			0.018	7.2				130				300	300
200			0.031	9.5				99				300	300
250			0.049	12				82				300	300
	300		0.07	15	18			67	88			300	300
	400		0.13	19	24			51	67			300	300
	450		0.14	22	28			41	53			300	300
	500		0.20	24	30			41	53	78		300	300
	600		0.28	28	35	49		34	45	65		300	300
	700		0.38	33	41	57		29	38	56		300	300
	800		0.50	38	47	65		26	34	49		300	300
	900		0.64	42	53	73	91	23	30	43	55	300	300
	1000		0.79	47	58	81	101	21	27	39	50	300	300
	1200		1.13	56	70	97	120	18	22	33	42	300	500
		1200*	1.13	65	81	112		19	25	37		300	500
			1.13	57	71	100	124	17	23	33		300	500
	1400		1.54	81	113	140				26	34	300	500
		1400*	1.54	75	94	131	161	17	22	32	41	300	500
			1.54		83	116	145	15	19	28	36	300	500
	1600		2.01		93	129	160			21	27	300	500
		1600*	2.01	86	107	149	184	15	19	28	36	300	500
			2.01	76	95	132	165	13	17	25	32	300	500
	1800		2.54			145	180				22	300	500
		1800*	2.54	96	120	167	206	13	17	25	32	300	500
			2.54	85	106	148	185	11	15	22	28	300	500
	2000		3.14			162	200					300	500
		2000*	3.14	107	133	186	229	12	15	22	28	300	500
			3.14	94	118	165	205	10	13	20	25	300	500
	2200		3.80				219					300	700
		2200*	3.80	117	147	204	252		14	20	26	300	700
			3.80	104	129	181	225	9	12	18	23	300	700
	2400*		4.52	128	160	221	274		13	19	24	300	700
		2400	4.52	113	141	197	246		11	16	21	300	700
	2700*		5.73	144	179	250	308			16	20	500	700
		2700	5.73	127	159	222	276			15	19	500	700
	3000*		7.07		199	278	342			13	17	500	1000
		3000	7.07		176	246	306			12	16	500	1000
	3300*		8.55			305	376				14	500	1000
		3300	8.55			270	336				13	500	1000
	3600*		10.18				410				12	500	1000
		3600	10.18				367				11	500	1000

(*NON STANDARD - AVAILABLE UPON REQUEST)



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Products and services are available throughout the US and worldwide, please visit WWW.AIL.CA for contact information.

FOR ASSISTANCE IN PRICING, ORDERING, AND INSTALLATIONS, CALL TOLL FREE IN NORTH AMERICA: 1 877-AIL-PIPE (1 877-245-7473)

The AIL group of companies:

