

Minimum & Maximum Cover For 2 2/3" x 1/2" Steel Pipe

GAGE	0.064"		0.079"		0.109"		0.138"		0.168"	
	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)
12	12	100+	12	100+	12	100+	12	100+	12	100+
15	12	100+	12	100+	12	100+	12	100+	12	100+
18	12	100+	12	100+	12	100+	12	100+	12	100+
21	12	100+	12	100+	12	100+	12	100+	12	100+
24	12	100+	12	100+	12	100+	12	100+	12	100+
27	12	100+	12	100+	12	100+	12	100+	12	100+
30	12	99	12	100+	12	100+	12	100+	12	100+
36	12	83	12	100+	12	100+	12	100+	12	100+
42	12	71	12	88	12	100+	12	100+	12	100+
48	12	62	12	77	12	100+	12	100+	12	100+
54			12	66	12	93	12	100+	12	100+
60					12	79	12	100+	12	100+
66					12	68	12	88	12	100+
72							12	75	12	93
78									12	79
84									12	66

Minimum & Maximum Cover For 3" x 1" Steel Pipe

GAGE	0.064"		0.079"		0.109"		0.138"		0.168"	
	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)
36	12		12		12	100+	12	100+	12	100+
42	12		12		12	100+	12	100+	12	100+
48	12		12	76	12	100+	12	100+	12	100+
54	12	63	12	79	12	100+	12	100+	12	100+
60	12	56	12	71	12	99	12	100+	12	100+
66	12	52	12	64	12	90	12	100+	12	100+
72	12	47	12	59	12	82	12	100+	12	100+
78	12	44	12	54	12	77	12	98	12	100+
84	12	41	12	51	12	71	12	92	12	100+
90	12	37	12	47	12	67	12	86	12	100+
96	12	35	12	44	12	62	12	80	12	98
102	18	33	18	42	18	59	18	76	18	93
108			18	40	18	55	18	71	18	87
114			18	36	18	51	18	66	18	80
120			18	34	18	46	18	61	18	75
126					18	44	18	56	18	70
132					18	41	18	53	18	64
138					18	37	18	49	18	60
144							18	44	18	55
150									18	52

Minimum & Maximum Cover For 5" x 1" Steel Pipe*

GAGE	0.064"		0.079"		0.109"		0.138"		0.168"	
	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)
36	12	81	12	90	12	100+	12	100+	12	100+
42	12	71	12	77	12	100+	12	100+	12	100+
48	12	62	12	68	12	100+	12	100+	12	100+
54	12	56	12	70	12	98	12	100+	12	100+
60	12	50	12	63	12	88	12	100+	12	100+
66	12	46	12	57	12	80	12	100+	12	100+
72	12	42	12	52	12	73	12	95	12	100+
78	12	39	12	48	12	68	12	87	12	100+
84	12	36	12	45	12	63	12	81	12	99
90	12	33	12	42	12	59	12	76	12	93
96	12	31	12	39	12	55	12	71	12	87
102	18	29	18	37	18	52	18	67	18	82
108			18	35	18	49	18	63	18	77
114			18	32	18	45	18	58	18	71
120			18	30	18	41	18	54	18	66
126					18	39	18	50	18	62
132					18	36	18	47	18	57
138					18	33	18	43	18	53
144							18	39	18	49
150									19	47

*Table for pipe with helical lockseams or helical welded seams ONLY.

Minimum & Maximum Cover For 6" x 2" Steel Structural Plate Pipe**

GAGE	ALL	0.111"		0.140"		0.170"		0.188"		0.218"		0.249"		0.280"	
		Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)
60	12	46	68	90	100+	100+	100+	100+	100+	100+	100+	100+	100+	100+	100+
66	12	42	62	81	93	100+	100+	100+	100+	100+	100+	100+	100+	100+	100+
72	12	38	57	75	86	100+	100+	100+	100+	100+	100+	100+	100+	100+	100+
78	12	35	52	69	79	95	100+	100+	100+	100+	100+	100+	100+	100+	100+
84	12	33	49	64	73	88	100+	100+	100+	100+	100+	100+	100+	100+	100+
90	12	31	45	60	68	82	97	100+	100+	100+	100+	100+	100+	100+	100+
96	12	29	43	56	64	77	91	100+	100+	100+	100+	100+	100+	100+	100+
102	18	27	40	52	60	73	86	94	100+	100+	100+	100+	100+	100+	100+
108	18	25	38	50	57	69	81	88	100+	100+	100+	100+	100+	100+	100+
114	18	24	36	47	54	65	77	84	100+	100+	100+	100+	100+	100+	100+
120	18	23	34	45	51	62	73	80	100+	100+	100+	100+	100+	100+	100+
126	18	22	32	42	49	59	69	76	100+	100+	100+	100+	100+	100+	100+
132	18	21	31	40	46	56	66	72	100+	100+	100+	100+	100+	100+	100+
138	18	20	29	39	44	54	63	69	100+	100+	100+	100+	100+	100+	100+
144	18	19	28	37	43	51	61	66	100+	100+	100+	100+	100+	100+	100+
150	24	18	27	36	41	49	58	64	100+	100+	100+	100+	100+	100+	100+
156	24	17	26	34	39	47	56	61	100+	100+	100+	100+	100+	100+	100+
162	24	17	25	33	38	46	54	59	100+	100+	100+	100+	100+	100+	100+
168	24	16	24	32	36	44	52	57	100+	100+	100+	100+	100+	100+	100+
174	24	16	23	31	35	42	50	55	100+	100+	100+	100+	100+	100+	100+
180	24	15	22	30	34	41	48	53	100+	100+	100+	100+	100+	100+	100+
186	24	15	22	29	33	40	47	51	100+	100+	100+	100+	100+	100+	100+
192	24		21	28	32	38	45	50	100+	100+	100+	100+	100+	100+	100+
198	30		20	27	31	37	44	48	100+	100+	100+	100+	100+	100+	100+
204	30		20	26	30	36	43	47	100+	100+	100+	100+	100+	100+	100+
210	30		19	25	29	35	41	45	100+	100+	100+	100+	100+	100+	100+
216	30			25	28	34	40	44	100+	100+	100+	100+	100+	100+	100+
222	30			24	27	33	39	43	100+	100+	100+	100+	100+	100+	100+
228	30			23	27	32	38	42	100+	100+	100+	100+	100+	100+	100+
234	30			23	26	31	37	41	100+	100+	100+	100+	100+	100+	100+
240	30				25	31	36	40	100+	100+	100+	100+	100+	100+	100+
246	36				25	30	35	39	100+	100+	100+	100+	100+	100+	100+
252	36					29	34	38	100+	100+	100+	100+	100+	100+	100+
258	36					28	34	37	100+	100+	100+	100+	100+	100+	100+
264	36					28	33	36	100+	100+	100+	100+	100+	100+	100+
270	36					27	32	35	100+	100+	100+	100+	100+	100+	100+
276	36						31	34	100+	100+	100+	100+	100+	100+	100+
282	36						31	34	100+	100+	100+	100+	100+	100+	100+
288	42						30	33	100+	100+	100+	100+	100+	100+	100+
294	42							32	100+	100+	100+	100+	100+	100+	100+
300	42							32	100+	100+	100+	100+	100+	100+	100+
306	42							31	100+	100+	100+	100+	100+	100+	100+
312	42							30	100+	100+	100+	100+	100+	100+	100+

**Longitudinal seams use (4) 3/4" dia. bolts per foot.

GENERAL NOTES

- All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
- The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
- No more than one type of pipe may be used on any single installation or installation grouping.
- All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
- See Standard Drawing "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
- Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the top of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflection.
- These tables have been developed for an H-20 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2000 AASHTO "LRFD

———— CORRUGATED CIRCULAR STEEL PIPE ————

———— CORRUGATED STEEL PIPE-ARCH ————

Minimum & Maximum Cover For 2 2/3" x 1/2" Steel Pipe-Arch

Span x Rise (In. x In.)	Corner Radius (In)	Minimum Gage (In)	Min. Cover (In)	Max. Cover (Ft)	
				2 Tons Corner Bearing Pressure	3 Tons Corner Bearing Pressure
17 x 13	3	0.064	12	16	18
21 x 15	3	0.064	12	15	14
24 x 18	3	0.064	12	15	13
28 x 20	3	0.064	12	15	11
35 x 24	3	0.064	12	15	7
42 x 29	3 1/2	0.064	12	15	7
49 x 33	4	0.079	12	15	6
57 x 38	5	0.109	12	15	8
64 x 43	6	0.109	12	15	9
71 x 47	7	0.138	12	15	10
77 x 52	8	0.168	12	15	10
83 x 57	9	0.168	12	15	10

Minimum & Maximum Cover For 3" x 1" Steel Pipe-Arch

Span x Rise (In. x In.)	Corner Radius (In)	Minimum Gage (In)	Min. Cover (In)	Max. Cover (F	
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