

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 Bridge Design Specifications".

GAGE	0.060"		0.075"		0.105"		0.135"	
	Min. (In.)	Max. (Ft)	Min. (In.)	Max. (Ft)	Min. (In.)	Max. (Ft)	Min. (In.)	Max. (Ft)
12	24	35	24	50				
18	24	34	24	49				
24	24	25	24	36	24	63	24	82
30	24	19	24	28	24	50	24	65
36	24	15	24	24	24	41	24	54
42			24	19	24	35	24	46
48			24	17	24	30	24	40
54			24	14	24	27	24	35
60			24	12	24	24	24	30

\* $\frac{3}{4}$  x  $\frac{3}{4}$  x  $\frac{7}{8}$  in. or  $\frac{3}{4}$  x 1 x  $\frac{1}{2}$  in. Corrugations

Span x Rise (In. x In.)	Min. Cover (In.)	Soil Corner Bearing Capacity of 2 Tons/ s.f.		
		0.060"	0.075"	0.105"
		Max. Cover (ft.)	Max. Cover (ft.)	Max. Cover (ft.)
20 x 16	12	13		
23 x 19	12	14		
27 x 21	12	13		
33 x 26	12	13		
40 x 31	12	13		
46 x 36	12	14		
53 x 41	18		13	
60 x 46	18		20	
66 x 51	18		21	
73 x 55	18			21
81 x 59	18			17
87 x 63	18			17
95 x 67	18			17

\* $\frac{3}{4}$  x  $\frac{3}{4}$  x  $\frac{7}{8}$  in. or  $\frac{3}{4}$  x 1 x  $\frac{1}{2}$  in. Corrugations

ALUMINUM SPIRAL RIB PIPE

STEEL SPIRAL RIB PIPE

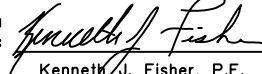
GAGE	0.064"		0.079"		0.109"		0.138**	
	Min. (In.)	Max. (Ft)	Min. (In.)	Max. (Ft)	Min. (In.)	Max. (Ft)	Min. (In.)	Max. (Ft)
18	12							
24	12	51	12	72	12	121		
30	12	41	12	58	12	97		
36	12	34	12	48	12	81		
42	12	29	12	41	12	69		
48	12	26	12	36	12	61		
54	18	23	18	32	18	54		
60	18	21	18	29	18	49	18	73
66	18	19	18	26	18	44	18	65
72			18	24	18	40	18	59
78			24	22	24	37	24	55
84			24	21	24	35	24	52
90					24	32	24	47
96					24	30	24	44
102					30	29	30	43
108					30	27	30	41

\* $\frac{3}{4}$  x  $\frac{3}{4}$  x  $\frac{7}{8}$  in. or  $\frac{3}{4}$  x 1 x  $\frac{1}{2}$  in. Corrugations  
 \*\* $\frac{3}{4}$  x  $\frac{3}{4}$  x  $\frac{7}{8}$  in. Corrugations Only.

Span x Rise (In. x In.)	Min. Cover (In.)	Soil Corner Bearing Capacity of 2 Tons/ s.f.		
		0.064"	0.079"	0.109"
		Max. Cover (ft.)	Max. Cover (ft.)	Max. Cover (ft.)
20 x 16	12	13		
23 x 19	12	14		
27 x 21	12	13		
33 x 26	12	13		
40 x 31	12	13		
46 x 36	12	14		
53 x 41	18		13	
60 x 46	18		20	
66 x 51	18		21	
73 x 55	18			21
81 x 59	18			17
87 x 63	18			17
95 x 67	18			17

\* $\frac{3}{4}$  x  $\frac{3}{4}$  x  $\frac{7}{8}$  in. or  $\frac{3}{4}$  x 1 x  $\frac{1}{2}$  in. Corrugations

State of Alaska DOT&PF  
 ALASKA STANDARD PLAN  
 PIPE AND ARCH TABLES  
 (SPIRAL RIB PIPE)

Adopted as an Alaska Standard Plan by:   
 Kenneth J. Fisher, P.E.  
 Chief Engineer

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Last Code and Stds. Review By: Date:

Next Code and Standards Review date: 02/08/2029