

PIPE DIAMETER (IN.)	AREA (SQ. FT.)	CORRUGATED STEEL PIPE - 2 2/3" x 1/2" CORRUGATIONS									
		MAXIMUM HEIGHT OF COVER LIMITS IN FEET									
		SHEET THICKNESS IN INCHES (GAUGE)									
		.064 (16)		.079 (14)		.109 (12)		.138 (10)		.168 (8)	
		CIRCULAR	ELONGATED	CIRCULAR	ELONGATED	CIRCULAR	ELONGATED	CIRCULAR	ELONGATED	CIRCULAR	ELONGATED
12	.79	92		101							
15	1.23	69	74	80		104		108			
18	1.77	47	61	55	67	71	86	89	90	94	
21	2.40	36	53	41	57	51	74	62	77	74	81
24	3.14	29	46	33	50	40	65	47	68	55	71
27	3.98	26	41	28	44	33	57	38	60	44	63
30	4.91	23	37	25	40	28	52	32	54	36	56
33	5.94	21	33	23	36	25	47	28	49	31	51
36	7.1	20	30	21	33	23	43	26	45	28	47
42	9.6	19	34	20	40	21	42	22	45	24	48
48	12.6	18	30	19	38	19	39	20	41	21	43
54	16.0			18	32	19	38	19	39	20	40
60	19.6					18	34	19	38	19	39
66	23.8							18	34	18	37
72	28.3							18	26	18	33
78	33.2									18	26
84	38.5									17	20

MINIMUM SHEET THICKNESS FOR ENTRANCES WITH LESS THAN 1 FOOT COVER.

Notes:
 Cover heights indicated in tables are for finished construction.
 To protect pipe during construction, minimum height of cover to be as follows prior to allowing construction traffic to cross installation.

Pipe Diameter	Min. Cover Height* During Construction
12" to 30"	1'-6"
36" and above	Diameter 2

Minimum finished height of cover is to be 1/8 Dia. or 1'-0", whichever is greater, except pipe underentrances and medians crossovers where a 9" minimum will be permitted for pipe up to 24" diameter in which case the tabulated Min. sheet thickness for entrances with less than 1 foot cover shall be used.

PIPE DIAMETER (IN.)	AREA (SQ. FT.)	CORRUGATED STEEL PIPE - 3" x 1" and 5" x 1" CORRUGATIONS									
		MAXIMUM HEIGHT OF COVER LIMITS IN FEET									
		SHEET THICKNESS IN INCHES (GAUGE)									
		.064 (16)		.079 (14)		.109 (12)		.138 (10)		.168 (8)	
		CIRCULAR	ELONGATED	CIRCULAR	ELONGATED	CIRCULAR	ELONGATED	CIRCULAR	ELONGATED	CIRCULAR	ELONGATED
36	7.1	34	53	38	66	47	95	57	114	66	130
42	9.6	27	45	30	56	36	72	42	84	48	97
48	12.6	24	39	26	49	30	60	34	68	38	76
54	16.0	22	35	23	44	26	52	28	57	31	63
60	19.6	20	31	21	39	23	47	25	51	27	55
66	23.8	19	28	20	36	22	44	23	47	25	50
72	28.3	19	26	19	33	20	41	22	44	23	46
78	33.2	18	24	19	30	20	40	21	42	21	43
84	38.5	18	22	18	28	19	39	20	40	21	42
90	44.2	18	21	18	26	19	38	19	39	20	40
96	50.3			18	24	18	36	19	38	19	39
102	56.7			18	22	18	31	18	37	19	38
108	63.6					18	26	18	34	18	37
114	70.9					18	22	18	29	18	36
120	78.5						17	19	18	25	31
132	95.0								17	18	23
144	113.0									17	18

* The cover shall extend the full length of the pipe. The approach fill is to approach fill is to extend a Min. of (10) (Dia. 1/2 Dia.) on each side of the structure, or to the intersection with a cut.

Allowable cover height, as indicated in the tables to the left, in excess of 100' are to be considered as special design installations and will require detailed foundation determination.

For details of elongated pipe see sheet 17 of 17.

The allowable cover tables shown are based on a soil modulus of 700 PSI. All other design criteria are in accordance with the AASHTO Specifications and VDOT Modifications for Soil Corrugated Metal Structure Interaction Systems.

CONCRETE-LINED CORRUGATED STEEL PIPE

Maximum height of cover to be in accordance with the tables but shall not exceed 30'.
 Method "A" bedding is to be used
 No elongated pipe allowed

Sheet 3 of 17

SPECIFICATION REFERENCE
 302
 232

**CORRUGATED STEEL PIPE
 HEIGHT OF COVER TABLE FOR H-20 LIVE LOAD**
 VIRGINIA DEPARTMENT OF TRANSPORTATION