

REVISED	STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
	VA.				

PC-1

CORRUGATED STEEL PIPE
2, 2 3/4" x 1/2" CORRUGATIONS

PIPE DIAMETER INCHES	AREA SQ. FT.	MAXIMUM HEIGHT OF COVER IN FEET		MINIMUM SHEET THICKNESS FOR PIPES WITH LESS THAN 1 FT. COVER INCHES (GAUGE)
		0.084 (18)	0.109 (16)	
12	0.79	18	100	0.064 (18)
15	1.23	18	80	0.064 (18)
18	1.77	18	55	0.064 (18)
21	2.40	16	41	0.079 (14)
24	3.14	17	33	0.109 (12)
27	3.98	17	28	0.109 (12)
30	4.91	17	25	0.109 (12)
33	5.94	17	23	0.109 (12)
36	7.1	16	21	0.109 (12)
42	9.6	16	20	0.109 (12)
48	12.6	15	19	0.109 (12)
54	16.0	15	19	0.109 (12)
60	19.6	15	19	0.109 (12)
66	23.8	15	19	0.109 (12)
72	28.3	15	19	0.109 (12)
78	33.2	15	19	0.109 (12)
84	38.5	15	19	0.109 (12)

CORRUGATED STEEL PIPE
3" x 1" AND 5" x 1" CORRUGATIONS

PIPE DIAMETER INCHES	AREA SQ. FT.	MAXIMUM HEIGHT OF COVER IN FEET		SHEET THICKNESS IN INCHES (GAUGE)	
		0.084 (18)	0.109 (16)	0.084 (18)	0.109 (16)
36	7.1	16	38	0.084 (18)	0.109 (16)
42	9.6	16	30	0.084 (18)	0.109 (16)
48	12.6	15	26	0.084 (18)	0.109 (16)
54	16.0	15	23	0.084 (18)	0.109 (16)
60	19.6	14	21	0.084 (18)	0.109 (16)
66	23.8	14	20	0.084 (18)	0.109 (16)
72	28.3	13	19	0.084 (18)	0.109 (16)
78	33.2	13	19	0.084 (18)	0.109 (16)
84	38.5	12	18	0.084 (18)	0.109 (16)
90	44.2	12	18	0.084 (18)	0.109 (16)
96	50.3	12	18	0.084 (18)	0.109 (16)
102	56.7	12	18	0.084 (18)	0.109 (16)
108	63.6	12	18	0.084 (18)	0.109 (16)
114	70.9	12	18	0.084 (18)	0.109 (16)
120	78.5	12	18	0.084 (18)	0.109 (16)
132	95.0	12	18	0.084 (18)	0.109 (16)
144	113.0	12	18	0.084 (18)	0.109 (16)

NOTES:

- COVER HEIGHTS INDICATED IN TABLES ARE FOR FINISHED CONSTRUCTION.
- TO PROTECT PIPE DURING CONSTRUCTION, MINIMUM HEIGHT OF COVER TO BE IN ACCORDANCE WITH TABLE PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS OVER THE PIPE OR THE INTERSECTION WITH A CUT.
- STANDARD MINIMUM FINISHED HEIGHT OF COVER FOR ALL PIPES EXCEPT UNDER ENTRANCES SHALL BE 2' 0" OR 1/2" DIAMETER, WHICHEVER IS GREATER. IN CASES IN WHICH THESE COVER HEIGHTS CANNOT BE ACHIEVED, AN ABSOLUTE MINIMUM FINISHED COVER HEIGHT OF 10 OR 1/2" DIAMETER, WHICHEVER IS GREATER, WILL BE REQUIRED. UNDER ENTRANCES IS ALL COVER HEIGHTS SHALL BE AT LEAST 2' 0" ABOVE THE TOP OF THE PIPE. UNDER ENTRANCES IS ALL COVER HEIGHTS SHALL BE AT LEAST 2' 0" ABOVE THE TOP OF THE PIPE. WHERE A POLYMER COATED PIPE WILL BE USED AND THE SURFACE OVER THE TOP OF THE PIPE WILL BE ASPHALT, CLASS 1 BACKFILL MATERIAL IS TO BE PLACED UP TO A MINIMUM OF 6" ABOVE THE TOP OF THE PIPE.
- 16 GAUGE PIPE LIMITED TO THOSE LOCATIONS WHERE PIPE DIAMETER PLUS COVER IS LESS THAN 20".
- THE MAXIMUM HEIGHT OF COVER SHOWN IN THE TABLES IS BASED ON A SOIL MODULUS OF 700 PSI. ALL OTHER DESIGN CRITERIA ARE IN ACCORDANCE WITH THE ASHTO SPECIFICATIONS AND VDOT MODIFICATIONS FOR SOIL CORRUGATED METAL STRUCTURE INTERACTION SYSTEMS.
- SEE STANDARD PB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.

TABLE A

PIPE DIAMETER	MINIMUM COVER HEIGHT DURING CONSTRUCTION (SEE NOTE 2)
12" TO 30"	18"
36" AND ABOVE	1/2" DIAMETER

CONCRETE-LINED CORRUGATED STEEL PIPE

MAXIMUM HEIGHT OF COVER TO BE IN ACCORDANCE WITH THE TABLES BUT SHALL NOT EXCEED 30".

SPECIFICATION REFERENCE	302 232
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CORRUGATED STEEL PIPE
HEIGHT OF COVER TABLES FOR H-20 LIVE LOAD

VIRGINIA DEPARTMENT OF TRANSPORTATION

SHEET 3 OF 18
 REV. 7/05
 107.07

PC-1

CORRUGATED ALUMINUM ALLOY PIPE -
2, 2 3/4" x 1/2" CORRUGATIONS

PIPE DIAMETER INCHES	AREA SQ. FT.	MAXIMUM HEIGHT OF COVER IN FEET		MINIMUM SHEET THICKNESS FOR PIPES WITH LESS THAN 1 FT. COVER INCHES (GAUGE)
		0.060 (18)	0.075 (16)	
12	0.8	18	50	0.060
15	1.2	18	39	0.060
18	1.8	18	30	0.060
21	2.4	18	25	0.060
24	3.1	17	22	0.060
27	4.0	17	20	0.060
30	4.9	17	19	0.060
33	5.9	17	18	0.060
36	7.1	16	16	0.060
42	9.6	16	18	0.060
48	12.6	16	18	0.060
54	15.9	16	18	0.060
60	19.6	15	17	0.060
66	23.8	15	17	0.060
72	28.3	15	17	0.060

NOTES:

- COVER HEIGHTS INDICATED IN TABLES ARE FOR FINISHED CONSTRUCTION.
- TO PROTECT PIPE DURING CONSTRUCTION, MINIMUM HEIGHT OF COVER TO BE IN ACCORDANCE WITH TABLE PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS OVER THE PIPE OR THE INTERSECTION WITH A CUT.
- STANDARD MINIMUM FINISHED HEIGHT OF COVER FOR ALL PIPES EXCEPT UNDER ENTRANCES SHALL BE 2' 0" OR 1/2" DIAMETER, WHICHEVER IS GREATER. IN CASES IN WHICH THESE COVER HEIGHTS CANNOT BE ACHIEVED, AN ABSOLUTE MINIMUM FINISHED COVER HEIGHT OF 10 OR 1/2" DIAMETER, WHICHEVER IS GREATER, WILL BE REQUIRED. UNDER ENTRANCES IS ALL COVER HEIGHTS SHALL BE AT LEAST 2' 0" ABOVE THE TOP OF THE PIPE. UNDER ENTRANCES IS ALL COVER HEIGHTS SHALL BE AT LEAST 2' 0" ABOVE THE TOP OF THE PIPE. WHERE A POLYMER COATED PIPE WILL BE USED AND THE SURFACE OVER THE TOP OF THE PIPE WILL BE ASPHALT, CLASS 1 BACKFILL MATERIAL IS TO BE PLACED UP TO A MINIMUM OF 6" ABOVE THE TOP OF THE PIPE.
- 16 GAUGE PIPE LIMITED TO THOSE LOCATIONS WHERE PIPE DIAMETER PLUS COVER IS LESS THAN 20".
- THE MAXIMUM HEIGHT OF COVER SHOWN IN THE TABLES IS BASED ON A SOIL MODULUS OF 700 PSI. ALL OTHER DESIGN CRITERIA ARE IN ACCORDANCE WITH THE ASHTO SPECIFICATIONS AND VDOT MODIFICATIONS FOR SOIL CORRUGATED METAL STRUCTURE INTERACTION SYSTEMS.
- SEE STANDARD PB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.

TABLE A

PIPE DIAMETER	MINIMUM COVER HEIGHT DURING CONSTRUCTION (SEE NOTE 2)
12" TO 24"	18"
30" AND OVER	EQUAL TO DIAMETER

SPECIFICATION REFERENCE	302 232
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CORRUGATED ALUMINUM ALLOY PIPE
HEIGHT OF COVER TABLE FOR H-20 LIVE LOAD

VIRGINIA DEPARTMENT OF TRANSPORTATION

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
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