

**STRUCTURAL PLATE ALUMINUM ALLOY PIPE
9" x 2½" CORRUGATIONS**

PIPE DIAMETER INCHES	AREA SQ. FT.	MAXIMUM HEIGHT OF COVER IN FEET						
		SHEET THICKNESS IN INCHES						
		0.10	0.125	0.15	0.175	0.20	0.225	0.25
60	20	29	32	35	38	41	45	48
66	24	26	28	31	33	35	38	40
72	28	24	25	27	29	31	33	35
78	33	22	24	25	26	28	29	31
84	38	21	22	23	25	26	27	28
90	44	20	21	22	23	24	25	26
96	50	19	20	21	22	23	23	24
102	57	18	20	20	21	22	22	23
108	64	17	19	20	20	21	21	22
114	71	16	19	19	20	20	21	21
120	78	15	18	19	19	20	20	20
132	95	14	18	18	19	19	19	19
144	113	12	18	18	18	18	19	19
156	133		17	18	18	18	18	18
168	154			17	18	18	18	18
180	177				17	18	18	18
192	201					17	17	17
204	227					14	16	17
216	254						13	15
228	284							13

NOTES:

- COVER HEIGHTS INDICATED IN TABLE ARE FOR FINISHED CONSTRUCTION.
- TO PROTECT PIPE DURING CONSTRUCTION, MINIMUM HEIGHT OF COVER PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS INSTALLATION SHALL BE ½ DIAMETER. THIS COVER SHALL EXTEND THE FULL LENGTH OF THE PIPE. THE APPROACH FILL RAMP IS TO EXTEND A MINIMUM OF 10(DIAMETER + 36") ON EACH SIDE OF THE PIPE OR TO THE INTERSECTION WITH A CUT.
- STANDARD MINIMUM FINISHED HEIGHT OF COVER FOR ALL PIPES SHALL BE 2.0' OR ½ DIAMETER, WHICHEVER IS GREATER. IN CASES IN WHICH THESE COVER HEIGHTS CANNOT BE ACHIEVED, AND ABSOLUTE MINIMUM FINISHED COVER HEIGHT OF 1.0' OR ⅙ DIAMETER, WHICHEVER IS GREATER, WILL BE ALLOWED ONLY IF ALL POSSIBLE MEANS TO OBTAIN THE STANDARD VALUE HAVE BEEN EXHAUSTED.
- SEE STANDARD PB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.
- 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 AASHTO SPECIFICATIONS AND VDOT MODIFICATIONS FOR SOIL CORRUGATED METAL STRUCTURE INTERACTION SYSTEMS.
- STEEL BOLTS ONLY TO BE USED. BOLTS ARE ¾" DIAMETER HIGH STRENGTH TO MEET CURRENT AASHTO DESIGNATION M-164 AND GALVANIZED TO MEET CURRENT ASTM DESIGNATION A-394. BOLTS ARE TO BE LOCATED IN THE VALLEY AND CREST OF EACH CORRUGATION IN DOUBLE ROWS SPACED 1¾" APART.



ROAD AND BRIDGE STANDARDS

SHEET 9 OF 18

REVISION DATE

107.13

**STRUCTURAL PLATE ALUMINUM ALLOY PIPE
HEIGHT OF COVER TABLE FOR H-20 LIVE LOAD**

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION
REFERENCE

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