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

NCHES   NCHES   SQ. FT.   SHEET   THICKNESS IN   INCHES   SQ.									
SHEET THICKNESS IN INCHES (GAUGE)   SINTRANCE PIPES WITH LESS THAN 1 FT. COVER	5:55		MAXIMUM HEIGHT OF COVER IN FEET						
INCHES         SQ. FT.         0.060 (16)         0.075 (14)         0.105 (12)         0.135 (10)         0.164 (8)         1 FT. COVER           12         0.8         18         50         80         90         93         0.060           15         1.2         18         39         49         60         71         0.105           18         1.8         18         30         35         41         48         0.135           21         2.4         18         25         28         32         36           24         3.1         17         22         25         27         30           27         4.0         17         20         22         24         26           30         4.9         17         19         21         22         23           33         5.9         17         18         20         21         22           36         7.1         16         16         19         20         21           42         9.6         16         18         18         19         19           48         12.6         18         18         18         18 <td></td> <td>AREA</td> <td>SHEET</td> <td>THICKNE</td> <td colspan="2">ENTRANCE PIPES</td>		AREA	SHEET	THICKNE	ENTRANCE PIPES				
15     1.2     18     39     49     60     71     0.105       18     1.8     18     30     35     41     48     0.135       21     2.4     18     25     28     32     36       24     3.1     17     22     25     27     30       27     4.0     17     20     22     24     26       30     4.9     17     19     21     22     23       33     5.9     17     18     20     21     22       36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17       66     23.8     14     14	INCHES	SQ. FT.						WITH LESS THAN 1 FT. COVER	
18     1.8     18     30     35     41     48     0.135       21     2.4     18     25     28     32     36       24     3.1     17     22     25     27     30       27     4.0     17     20     22     24     26       30     4.9     17     19     21     22     23       33     5.9     17     18     20     21     22       36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17       66     23.8     14     14	12	0.8	18	50	80	90	93	0.060	
21     2.4     18     25     28     32     36       24     3.1     17     22     25     27     30       27     4.0     17     20     22     24     26       30     4.9     17     19     21     22     23       33     5.9     17     18     20     21     22       36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17       66     23.8     14     14	15	1.2	18	39	49	60	71	0.105	
24     3.1     17     22     25     27     30       27     4.0     17     20     22     24     26       30     4.9     17     19     21     22     23       33     5.9     17     18     20     21     22       36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17       66     23.8     14     14	18	1.8	18	30	35	41	48	0.135	
27     4.0     17     20     22     24     26       30     4.9     17     19     21     22     23       33     5.9     17     18     20     21     22       36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17     14       66     23.8     14     14	21	2.4	18	25	28	32	36		
30     4.9     17     19     21     22     23       33     5.9     17     18     20     21     22       36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17       66     23.8     14     14	24	3.1	17	22	25	27	30		
33     5.9     17     18     20     21     22       36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17     17       66     23.8     14     14	27	4.0	17	20	22	24	26		
36     7.1     16     16     19     20     21       42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18     18       60     19.6     15     17     17       66     23.8     14     14	30	4.9	17	19	21	22	23		
42     9.6     16     18     18     19     19       48     12.6     18     18     18     18       54     15.9     16     18     18       60     19.6     15     17       66     23.8     14	33	5.9	17	18	20	21	22		
48     12.6     18     18     18       54     15.9     16     18     18       60     19.6     15     17       66     23.8     14	36	7.1	16	16	19	20	21		
54     15.9     16     18     18       60     19.6     15     17       66     23.8     14	42	9.6	16	18	18	19	19		
60 19.6 15 17 66 23.8 14	48	12.6			18	18	18		
66 23.8 14	54	15.9			16	18	18		
00 20.0	60	19.6				15	17		
72 28.3 11	66	23.8					14		
	72	28.3					11		

PIPE- 3" x 1" CORRUGATIONS							
DIDE	AREA	MAXIMUM HEIGHT OF COVER IN FEET					
PIPE DIAMETER		SHEET THICKNESS IN INCHES (GAUGE)					
INCHES	SQ. FT.	0.60 (16)	0.75 (14)	0.105 (12)	0.35 (10)	0.164 (8)	
36	7.1	16	24	27	30	34	
42	9.6	16	21	23	25	27	
48	12.6	15	20	21	22	24	
54	16.0	15	19	20	21	22	
60	19.6	14	18	19	20	20	
66	23.8		18	18	19	19	
72	28.3		18	18	18	19	
78	33.2		17	18	18	18	
84	38.5			17	18	18	
90	44.2			15	17	18	
96	50.3			12	16	17	
102	56.7				14	17	
108	63.6				11	14	
114	70.9					12	
120	78.5					10	

CORRUGATED ALUMINUM ALLOY

## NOTES:

- 1. COVER HEIGHTS INDICATED IN TABLES ARE FOR FINISHED CONSTRUCTION.
- 2. TO PROTECT PIPE DURING CONSTRUCTION, MINIMUM HEIGHT OF COVER TO BE IN ACCORDANCE WITH TABLE A PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS INSTALLATION. THE COVER SHALL EXTEND THE FULL LENGTH OF THE PIPE. THE APPROACH FILL RAMP IS TO EXTEND A MINIMUM OF 20 DIAMETERS ON EACH SIDE OF THE PIPE, OR TO THE INTERSECTION WITH A CUT.
- 3. STANDARD MINIMUM FINISHED HEIGHT OF COVER FOR ALL PIPES, EXCEPT THOSE 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 1.0' OR 1/8 DIAMETER, WHICHEVER IS GREATER, WILL BE ALLOWED ONLY IF ALL POSSIBLE MEANS TO OBTAIN THE STANDARD VALUE HAVE BEEN EXHAUSTED. THE MINIMUM FINISHED HEIGHT OF COVER FOR PIPES UNDER ENTRANCES IS 9" FOR PIPE DIAMETERS EQUAL TO OR LESS THAN 18" AND 12" OR 1/8 DIAMETER, WHICHEVER IS GREATER, FOR PIPE DIAMETERS GREATER THAN 18".
- 4. 16 GAUGE PIPE LIMITED TO THOSE LOCATIONS WHERE PIPE DIAMETER PLUS COVER IS LESS THAN 20'.
- 5. 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 AASHTO SPECIFICATIONS AND VDOT MODIFICATIONS FOR SOIL CORRUGATED METAL STRUCTURE INTERACTION SYSTEMS.
- 6. 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** CORRUGATED ALUMINUM ALLOY PIPE REFERENCE HEIGHT OF COVER TABLE FOR H=20 LIVE LOAD 232 302

**\**VDOT

ROAD AND BRIDGE STANDARDS

**REVISION DATE** 

SHEET 4 OF 18 107.08

VIRGINIA DEPARTMENT OF TRANSPORTATION