2016 ROAD & BRIDGE STANDARDS

| ALUMINUM SPIRAL RIB PIPE $\frac{3}{4}$ " WIDE x $\frac{3}{4}$ " DEEP RIBS SPACED @ 7 $\frac{1}{2}$ " | | | | | | | | | | | |
|--|-----------------|-----------|--------------------------------|------------|------------|------------------------------|--|--|--|--|--|
| PIPE DIAMETER INCHES | AREA SQ. FT. | MA | MINIMUM SHEET THICKNESS FOR | | | | | | | | |
| | | SH | ENTRANCE PIPE | | | | | | | | |
| | | 0.06 (16) | 0.075 (14) | 0.105 (12) | 0.135 (10) | 1 FT. COVER INCHES (GUAGE | | | | | |
| 12 | 0.8 | 75 | 103 | 166 | | 0.064 (16) | | | | | |
| 15 | 1.2 | 59 | 82 | 133 | 188 | 0.075 (14) | | | | | |
| 18 | 1.8 | 49 | 68 | 110 | 156 | 0.075 (14) | | | | | |
| 21 | 2.4 | 42 | 58 | 94 | 134 | 0.105 (12) | | | | | |
| 24 | 3.1 | 36 | 50 | 82 | 117 | 0.105 (12) | | | | | |
| 27 | 4.0 | 32 | 44 | 73 | 10.3 | 0.105 (12) | | | | | |
| 30 | 4.9 | 28 | 40 | 65 | 93 | 0.105 (12) | | | | | |
| 36 | 7.1 | 23 | 33 | 54 | 77 | 0.105 (12) | | | | | |
| 42 | 9.6 | 19 | 27 | 46 | 65 | 0.105 (12) | | | | | |
| 48 | 12.6 | 16 | 23 | 39 | 57 | 0.105 (12) | | | | | |
| 54 | 16.0 | 13 | 20 | 35 | 50 | 0.105 (12) | | | | | |
| 60 | 19.6 | 11 | 17 | 31 | 45 | 0.105 (12) | | | | | |
| 66 | 23.8 | 9 | 15 | 27 | 40 | 0.105 (12) | | | | | |
| 72 | 28.3 | 7 | 13 | 25 | 36 | 0.105 (12) | | | | | |

NOTES:

1. COVER HEIGHTS INDICATED IN TABLE ARE FOR FINISHED CONSTRUCTION, USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND ASSUMING 25% METAL LOSS AT END OF DESIGN LIFE.

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. STANDRD 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 1/4 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 LESS THAN OR EQUAL TO 18" AND 12" OR 1/4 DIAMETER, WHICHEVER IS GREATER, FOR PIPE DIAMETERS GREATER THAN 18".

4. SEE STANDARD PB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.

| | | TABLE A | | | | | | | | |
|--|--------------------------|---------------------------------------|---|---------------|--|---------------|---------------------------|--|--|--|
| | | PIPE DIAMETER | MINIMUM COVER HEIGHT DURING CONSTRUCTION (SEE NOTE 2) | | | | | | | |
| | | 12" TO 27" | 18'' | | | | | | | |
| | | 30" AND OVER | EQUAL TO DIAMETER | | | | | | | |
| SPECIFICATION A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE. | | | | | | | | | | |
| REFERENCE | ALUMINUM SPIRAL RIB PIPE | | | | | | ROAD AND BRIDGE STANDARDS | | | |
| 232 302 | | | | -93 LIVE LOAD | | REVISION DATE | SHEET 12 OF 18 | | | |
| | | VIRGINIA DEPARTMENT OF TRANSPORTATION | | | | 11/15 | 107.16 | | | |
| 2016 ROAD & BRIDGE STANDARDS | | | | | | | | | | |

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