## ALUMINUM SPIRAL RIB PIPE 3/4" WIDE x 3/4" DEEP RIBS SPACED @ 71/2"

| PIPE<br>DIAMETER<br>INCHES | AREA<br>SQ. FT. | MAXIMUM HEIGHT OF COVER IN FEET   |            |            |            | MINIMUM SHEET THICKNESS FOR ENTRANCE PIPES WITH LESS THAN 1 FT. COVER |
|----------------------------|-----------------|-----------------------------------|------------|------------|------------|---|
|                            |                 | SHEET THICKNESS IN INCHES (GAUGE) |            |            |            |   |
|                            |                 | 0.064 (16)                        | 0.079 (14) | 0.109 (12) | 0.135 (10) | INCHES (GUAGE)  |
| 12                         | 0.8             | 18                                | 95         | 100        |            | 0.064 (16)  |
| 15                         | 1.2             | 18                                | 57         | 78         | 100        | 0.109 (12)  |
| 18                         | 1.8             | 18                                | 40         | 52         | 65         | 0.135 (10)  |
| 21                         | 2.4             | 18                                | 31         | 39         | 47         |   |
| 24                         | 3.1             | 17                                | 26         | 32         | 37         |   |
| 27                         | 4.0             | 17                                | 24         | 27         | 31         |   |
| 30                         | 4.9             | 17                                | 22         | 24         | 27         |   |
| 36                         | 7.1             | 16                                | 20         | 21         | 23         |   |
| 42                         | 9.6             | 16                                | 18         | 19         | 20         |   |
| 48                         | 12.6            |                                   | 18         | 18         | 19         |   |
| 54                         | 16.0            |                                   |            | 18         | 18         |   |
| 60                         | 19.6            |                                   |            | 18         | 18         |   |
| 66                         | 23.8            |                                   |            |            | 18         |   |
| 72                         | 28.3            |                                   |            |            | 17         |   |

## 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. 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" OR 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.
- 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 INTERSECTION SYSTEMS.
- 6. 16 GAUGE PIPE LIMITED TO THOSE LOCATIONS WHERE PIPE DIAMETER PLUS COVER IS LESS THAN 20'.

| TABLE A       |   |  |  |  |  |
|---------------|---|--|--|--|--|
| PIPE DIAMETER | MINIMUM COVER HEIGHT<br>DURING CONSTRUCTION<br>(SEE NOTE 2) |  |  |  |  |
| 12" TO 24"    | 18"   |  |  |  |  |
| 30" AND OVER  | EQUAL TO DIAMETER   |  |  |  |  |

ROAD AND BRIDGE STANDARDS

SHEET 13 OF 18 REVISION DATE

107.17

## ALUMINUM SPIRAL RIB PIPE HEIGHT OF COVER TABLE FOR H-20 LIVE LOAD

SPECIFICATION REFERENCE

232 302

VIRGINIA DEPARTMENT OF TRANSPORTATION